

CONFIDENTIAL

Release Date _____

M-d

UNION TEXAS LUKACHUKAI #1-14 544
NE SW 14-37N-29E APACHE CO.

COUNTY Apache AREA 8 1/2 mi. NW- Redrock LEASE NO. NOO-14-20-2202
WELL NAME (CURTIS LITTLE, ^{Apr. 3-1-71} ~~Union Tex.~~) UNION TEX. PETROLEUM LUKACHUKAI #1-14 NAVAJO
LOCATION NE/SW SEC 14 TWP 37N RANGE 29E FOOTAGE 1900 FWL - 1800 FSL
ELEV 6215 GR 6220 KB SPUD DATE 8-2-70 STATUS PSA TOTAL DEPTH 3700'
COMP. DATE 2-8-75 T.D. reached 8-17-70
CONTRACTOR Signal Oilfield Service Inc., Denver

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY	
8 5/8"	202	150		DRILLED BY CABLE TOOL	
5 1/2"	3699	150		PRODUCTIVE RESERVOIR	<u>Barker Creek</u>
				INITIAL PRODUCTION	<u>None *</u>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
See reverse side of Form 4, Completion Report		X	X	

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG <u>Am Strat</u>
CBL; PDC; IES; DIL; AMP; SNP; BHC/GR			SAMPLE DESCRP.
			SAMPLE NO. <u>1617 Tuc. 3033</u>
			CORE ANALYSIS <u>3414-3524</u>
			DSTs <u>See reverse side</u>
REMARKS <u>* Swab tested, 5 bbls. per hour, 6% oil & 94% water</u>			APP. TO PLUG
			PLUGGING REP. <u>2-23-75</u>
			COMP. REPORT <u>3-16-75</u>

WATER WELL ACCEPTED BY _____
BOND CO. Travelers Indemnity Company BOND NO. 01-0130-259-71
BOND AMT. \$ 5,000 CANCELLED 3-26-76 DATE 1-16-70
FILING RECEIPT 2578 LOC. PLAT X WELL BOOK X PLAT BOOK X
API NO. 02-001-20134 DATE ISSUED 7-22-70 DEDICATION E/2 SW/4

PERMIT NUMBER 544

(over)

DRILL STEM TEST

NO.	FROM	TO	RESULTS
			Cored: 3414-3524
			DST 3418-64. Init. flow, 10", 1st SI, 60", 2nd
			flow, 90", 2nd SI, 105". Weak blow, 2nd flow,
			decreasing to very weak. IHMP, 1617#; ISIP,
			823#; FFP= 73#; FSIP= 764#; FHMP= 1662#. Rec.
			100' highly gas cut and oil cut mud with small
			amount of free water.

CORE RECORD

NO.	FROM	TO	RECOVERY	REMARKS
1	3414-3524			

REMEDIAL HISTORY

DATE STARTED - COMPLETED		WORK PERFORMED	NEW PERFORATIONS

ADDITIONAL INFORMATION

[illegible]

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG																	
DESIGNATE TYPE OF COMPLETION:																	
New Well	<input checked="" type="checkbox"/>	Work-Over	<input checked="" type="checkbox"/>	Deepen	<input type="checkbox"/>	Plug Back	<input type="checkbox"/>	Same Reservoir	<input checked="" type="checkbox"/>	Different Reservoir	<input type="checkbox"/>	Oil	<input checked="" type="checkbox"/>	Gas	<input type="checkbox"/>	Dry	<input type="checkbox"/>
DESCRIPTION OF WELL AND LEASE																	
Operator Curtis Little, Agent (orig. Union Texas Pet.)						Address c/o St. Mary Parish Land Company 1010 Denver Center Bldg.; Denver, Co. 80203											
Federal, State or Indian Lease Number or name of lessor if fee lease Navajo Tribal						Well Number Lukachukai 1-14		Field & Reservoir Wildcat									
Location 1800' FSL, 1900' FWL, Sec. 14-37N-29E						County Apache, Arizona											
Sec. TWP-Range or Block & Survey Sec. 14 - T 37 N - R 29 E, G.S..R.M.																	
Date spudded 8/2/70		Date total depth reached 8/17/70		Date completed, ready to produce See attached sheet.		Elevation (DV, RKB, RT or Gr.) 6220, kb		Elevation of casing hd. Range 6211									
Total depth 3700'		P.B.T.D. -----		Single, dual or triple completion? Single		If this is a dual or triple completion, furnish separate report for each completion.											
Producing interval (s) for this completion 3428-36, Barker Creek				Rotary tools used (interval) 0-3700'		Cable tools used (interval) No											
Was this well directionally drilled? No		Was directional survey made? No		Was copy of directional survey filed?		Date filed											
Type of electrical or other logs run (check logs filed with the completion): Induction; Sonic-Gamma Ray-Cal.; Sidewall Neutron; Amplitude; Dual Induction.						Date filed											
CASING RECORD																	
Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)																	
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled											
Surface	12 1/4"	8 5/8"	24#, K-55	202'	150	None											
Production	7 7/8"	5 1/2"	14#, J-55	3699'	150	None											
TUBING RECORD					LINER RECORD												
Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)										
See Attached Sheet	ft.	ft.	in.	ft.	ft.	ft.											
PERFORATION RECORD					ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD												
Number per ft.	Size & type	Depth Interval			Am't. & kind of material used		Depth Interval										
4	4" Hyperjet	3428-36"			See attached Sheet.												
INITIAL PRODUCTION																	
Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): See attached sheet.															
Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity											
See attached sheet.			See attached sheet.	MCF	See attached sheet.	bbbls.	37.2 API (Corr)										
Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio											
			See attached Sheet	MCF	bbbls.												
Disposition of gas (state whether vented, used for fuel or sold): Vented																	
<p>CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Agent and part owner of the (agent for St. Mary Parish Land Company) (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.</p> <p>16 March, 1975 Date</p> <p style="text-align: right;">Signature <i>Fred Berry</i></p>																	
RECEIVED																	
MAR 21 1975 O & G CONSV. COMM.					STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log Form No. 4 File One Copy												
Permit No 544																	

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Chinle	Surface		shale, minor sands and silts
Sonsala ss. of Chinle FM	600	695	Poor ss. --water-bearing.
DeChelly SS.	950	1150	Good ss.--aeolian origin. Cross-bedded. Main water sand ---- water.
	1150	1540	Lesser sands and silts --water bearing.
Cutler (Organ Rock)	1540	1983	Red silts, hard.
Cutler Evap. (Supai)	1983	2698	Interbedded red silts and thin anhydrite zones.
Hermosa Limestone	2698	3610	Limestone, minor cherts, shales, red silts, and sands.
Barker Creek	3412	3554	Limestone, reef bank, Chaetetes. Contains oil and salt water.
Pinkerton Trail	3554	3610	Red beds, silts and sands, some shales with interbedded limes.
(Hermosa SS.)	2965-	2985	Poor sandstone, contains salt water.
Molas	3610	3647	Maroon shale.
Mississippian Limestone	3647	TD	White, crystalline limestone.
			Cored: 3414-3524 DST 3418-64. Init. flow, 10", 1st SI, 60", 2nd flow, 90", 2nd SI, 105". Weak blow, 2nd flow, decreasing to very weak. IHMP, 1617#; ISIP, 823#; FFP= 73#; FSIP= 764#; FHMP= 1662#. Rec. 100' highly gas cut and oil cut mud with small amount of free water.

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach driller's log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil and Gas Conservation Commission not later than thirty days after project completion.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-P355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO.	
2. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input checked="" type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. ESSEV. <input type="checkbox"/> Other <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal	
3. NAME OF OPERATOR Curtis Little, Agent (originally Union Texas Petroleum)		7. UNIT AGREEMENT NAME	
4. ADDRESS OF OPERATOR c/o St. Mary Parish Land Company 1010 Denver Center Bldg.; Denver, Colorado 80203		8. FARM OR LEASE NAME Lukachukai	
5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1800' FSL, 1900' FWL, 14-37N-29E At top prod. interval reported below Same At total depth Same		9. WELL NO. 1-14	
10. PERMIT NO. DATE ISSUED		10. FIELD AND POOL, OR WILDCAT Wildcat	
11. COUNTY OR PARISH Apache		11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 14-T37N-R29E, G.S.R.M.	
12. STATE Arizona		12. COUNTY OR PARISH Apache	
13. DATE SPUDDED 8/2/70		13. DATE T.D. REACHED 8/17/70	
14. DATE COMPL. (Ready to prod.) See attached sheet		14. ELEVATIONS (DF, HKB, RT, OR, ETC.)* 6220*-KB; 6209*-gr.	
15. TOTAL DEPTH, MD & TVD 3700'		15. ELEV. CASINGHEAD 6211'	
16. PLUG, BACK T.D., MD & TVD		16. IF MULTIPLE COMPL., HOW MANY*	
17. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 3428-36, Barker Creek		17. INTERVALS DRILLED BY X	
18. TYPE ELECTRIC AND OTHER LOGS RUN Induction; Sonic-Gamma Ray-Caliper; Sidewall Neutron; Amplitude; Dual Induction-Laterolog.		18. ROTARY TOOLS CABLE TOOLS	
19. CASING RECORD (Report all strings set in well)		19. WAS DIRECTIONAL SURVEY MADE No	
20. LINER RECORD		20. WAS WELL CORRED Yes.	
21. TUBING RECORD		21. PERFORATION RECORD (Interval, size and number) 3428-36' with 4-4" hyperjets/foot.	
22. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.		22. PRODUCTION	
23. DATE FIRST PRODUCTION		23. PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) See attached sheet.	
24. DATE OF TEST		24. WELL STATUS (Producing or shut-in) Shut-in, now abnd.	
25. HOURS TESTED		25. CHOKER SIZE	
26. CHOKER SIZE		26. PROD'N. FOR TEST PERIOD	
27. OIL—BBL.		27. GAS—MCF.	
28. WATER—BBL.		28. GAS-OIL RATIO	
29. OIL GRAVITY-API (CORR.) 37.2°		29. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented.	
30. LIST OF ATTACHMENTS one attached sheet for summary of stimulation attempts and resulting production.		30. TEST WITNESSED BY Tom Adair, Curtis Little.	
31. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records		31. SIGNED Frederick A. P. [Signature]	
32. TITLE Agent and part owner.		32. DATE 23 Feb., 1975	

*(See instructions and spaces for Additional Data on Reverse Side)

U.S. G. CONS. CO.

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 38, below regarding separate reports for separate completions. (Drillers, geologists, sample and core analysis, all types electric, etc.), formations and/or State office. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formations and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 38. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES				38. GEOLOGIC MARKERS	
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES					
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH
Triassic, Sonora				Chinle	Surface
SS. ben., Petrified				DeChelly	940
Forest Member,				Cutler	1540
Chinle Fm.	600	695	Water	(Organ Rk.)	
			(main water sand); water	Cutler Evap.	1983
DeChelly SS.	950	1150	(lessor sands and silts); water	(Supai)	2698
	1150	1510	Salt water.	Hermosa	3412
Hermosa SS.	2965	2985	Oil and salt water.	Barker Creek	3554
				Pinkerton	3610
Barker Creek Fm.	3428	3436	Cored: 3414-3524.	Trail	3647
			DST 3418-64. Init. flow, 10", 1st SI,	Molas	
			60", 2nd flow, 90", 2nd SI, 105". Weak	Mississippian	
			flow, first flow. Weak blow, 2nd flow,		
			decreasing to very weak. IHP, 1617#;		
			ISIP, 823#; FFP=73#; PSIP=764#; FEMP=		
			1662#. Reo. 100' highly gas cut and oil		
			cut mud with small amount of free water.		

Fred Berry

26 February, 1975
951 Cragmont Ave.
Berkeley, Ca. 94708

Recommendations for Completion of Abandoned Petroleum Exploratory
Holes as Water Wells in the Cove-Red Rock, Arizona Area

The Cove-Red Rock area has no good water wells other than the well in the alluvium about 2 miles NE of Cove School that was recompleted in 1971-72 with a submersible electric pump. There are many small springs through the valley; however during dry years and many summers, these springs tend to dry up. During a drought, this Valley is especially hard hit. Thus water availability is a real problem for the people of the Valley. Always the people ask me--is there any water? They have been told by either Federal or Navajo Tribal representatives that there is no good subsurface water-bearing aquifer that might yield large quantities of high quality water in the Valley.

I believe that the DeChelly Sandstone is a good aquifer over much of the Red Rock-Cove Valley and that wells of high deliverability can be completed in it if care is exercised as to the location and method of completion of any water wells. The DeChelly serves as an excellent aquifer over much of the Defiance Uplift and is the source for nearly all the many large water wells that exist in the Round Rock-Lukachukai-Sawmill-Ft. Defiance-Ganado-Chinle-Many Farms region. There are special problems, however, in the Cove-Red Rock area. The principal one is that the static fluid level (potentiometric surface) of the DeChelly is anomalously low over much of this Valley. I do not yet understand why, though I suspect that the abnormally low potentials in the Barker Creek reef bank, some 2000' stratigraphically below the DeChelly, is the cause. The practical result is that the static level of DeChelly water commonly will be about 300-500' below the surface of the ground over most of the Valley. Thus artesian wells from this zone are impossible. Moreover, the water level is sufficiently low that windmills either will not work very well except in large windstorms or will be completely useless. Therefore any water well of any size at all will have to be pumped by a motor. A related problem is that where the DeChelly is close to the surface of the ground, part of it may be dry or the static head may be so small that it will be impossible to obtain a well of large yield. The best DeChelly water wells will be encountered where the DeChelly is 1000' or more deep. The Red Rock area is the best location for any water well because of its lower elevation; the northern edge of the Cove-Red Rock Valley, preferably near the top of the Chinle section, might be all right as well.

Still an additional problem is water quality. Scattered minor non-commercial oil accumulations definitely exist in the Cove area within the Barker Creek--which is some 2000' below the DeChelly as I have indicated already. Similar and probably non-commercial oil accumulations may exist towards the Red Rock end of the Valley. Minor amounts of gaseous and probably lesser amounts of liquid hydrocarbons probably have leaked upwards in a few spots--probably along fractures. We have encountered asphaltic material within the DeChelly in at least one petroleum test well drilled in the Cove area. DeChelly water near such petroleum leakage spots will be of good quality chemically, but may not taste very good.

There are minor sands within the Chinle that carry water. The sands are thin and small and will provide only small wells. The existing water wells in the Valley (other than the three discussed below) obtain their water either from these Chinle sands or from alluvium. The stray Chinle sand wells are generally poor wells.

There are three DeChelly water wells that have been drilled and completed in various manners within the Cove- Red Rock area. There is the Cove Day School well. It has both deliverability and water chemistry problems. It is located near the axis of Lukachukai anticline. Minor non-commercial Barker Creek oil accumulations exist downdip. Some of this petroleum leaks upwards into the DeChelly and migrates updip. It makes the water at Cove School taste rather oily and explains why that well has associated gas. In addition, that well has a high surface elevation (6400') and the DeChelly is not sufficiently deep (500' to the top); therefore there is very little head. The well was pumped with a pump jack and electric motor. However the low deliverability and poor water quality were discouraging. These efforts were suspended when the rods in the well became bent.

A DeChelly water well was drilled by the Tribe about 1 mile west of Red Rock Trading Post, NW/4-SE/4, Sec. 24-T37N-R30E, Apache Co., Arizona. I tracked down all the records on this well at one time. They are in storage now. My memory is that the well was drilled into the DeChelly. The surface is near the Chinle-Wingate contact. Thus the top of the DeChelly should be at about 1100'. (The total stratigraphic interval for the Chinle is about 1200' in this area.) The well is artesian with a very small flow rate of only 1 gal or so per minute. It was my conclusion that the artesian flow probably is coming from one of the minor Chinle sands and that the hole below the surface casing almost certainly has collapsed. I believe there was some evidence of hole collapse from the drill records. Any DeChelly water well in this area will have to be cased from the surface at least into the top of the DeChelly. My experience from drilling a number of petroleum exploratory holes in this Valley is that the Chinle tends to wash out and is very susceptible to caving. Thus the main trouble with this well was that it was drilled with cable tools rather than a rotary rig--thus there was no mud to stabilize the hole. Secondly, the hole was not cased. With a cable tool hole, it might or might not have been possible to case the hole immediately after it was drilled. Had the hole been cased and properly completed in the DeChelly, then the static DeChelly water level probably still would have been about 200' below the surface. It would have required a motor-driven pump. However, such a well near Red Rock, properly completed, would have a very large capacity.

The third DeChelly water well, also drilled by the Tribe, is located in the SE/4-NE/4, Sec. 23-T36N-R30E, Apache Co., Arizona. Again I obtained the records on this well especially but they are now in storage. The head (or potentiometric surface) is 6238'; the surface elevation is about 6600'. The Tribe put a windmill on the well; it takes practically a hurricane before any water is pumped to the surface. As it is, this well is essentially useless. I have forgotten the depth to the DeChelly in this well nor do I remember if the well is adequately cased. If the DeChelly is 800' or greater and if the hole is in good shape, then this well should be able to produce a lot of water if a motor-driven pump was installed.

We have drilled and abandoned four petroleum tests in the Cove area where casing is in place from the surface down through the DeChelly. All of these holes could be entered, the casing perforated opposite the DeChelly and made into water wells; each of them would require a motor-driven pumping unit to obtain any water. Due to the high completion and operating costs for any such well and the location of the four tests, I recommend that only one of these wells actually be completed as a water well, as discussed below. The name and location of these four exploratory tests are:

1. St. Mary Parish Land Co., 1-30 Ghee-Ateen, 1895' FSL, 2070' FSL, Sec. 30-T37N-R29E, Apache Co., Arizona.

2. Curtis Little (originally Union Texas Petroleum), Lukachukai 1-14, 1800' FSL, 1900' FWL, Sec. 14-T37N-R29E, Apache Co., Arizona.
3. St. Mary Parish Land Company, 2-16 Tseh-Da-Kate, 1550' FSL, 2165' FEL, Sec. 16-T37N-R29E, Apache Co., Arizona.
4. Curtis Little, 1-16 Tsehadat-Aie, 543' FNL, 922' FEL, Sec. 16-T37N-R29E, Apache Co., Arizona.

The third and fourth wells in the list above (St. Mary #2-16 Tseh-Da-Kate and Curtis Little #1-16 Tsehadat-Aie) almost certainly should be eliminated due to their exceptionally remote location and the very marginal contribution they would make to the Navajo community in the Cove area. As stated previously, a motor-driven pumping unit would be required. These test holes are at least 5 miles from an existing power line. No one lives in that valley; it is used for summer grazing only by two families. There are several good springs along that valley; I have never known all of those springs to dry up even in the driest summer. A water well would marginally benefit one family and possibly one other family as well--as a supplementary source of livestock water.

The second well (Curtis Little, 1-14 Lukachukai) on the above list is the one we have just plugged and abandoned. It would be possible to make a good DeChelly water well at this site; again a motor-driven pumping unit absolutely would be required. The DeChelly static head should be at an elevation of about 5700-5750'; the surface elevation is 6209'. The top of the DeChelly is 950' below the surface; thus the static head of the DeChelly should be about 450' above the top of that zone. This locality is about 1 mile from an electric power line. There is a spring at this locality; it is a very small, poor spring that is dried up much of the time. The location is still rather remote with respect to where the people in the Cove area live and travel. A water well at this locality would benefit principally two families. It is my impression that a high cost water well such as this one would be (both installation and operating costs) should serve more than two families (one family year around and one family in the summer only).

The first well (St. Mary #1-30 Ghee-Ateen) is the only one of the four that I feel should be completed as a water well at the present time. It is located right next to the Red Rock-Cove road. Quite a few families live in the area. An electric power line goes right beside the locality. Its location is not so attractive geologically--but it should make a medium-size DeChelly water well. The ground elevation is 6015'; the top of the DeChelly is at a depth of 548'. Casing is cemented to 1225'. The big question mark is just what will be the elevation of the static fluid level in the DeChelly. My estimate is an elevation of about 5700'--which would be about 300' below the surface and some 200' above the top of the DeChelly. However, it could be lower; there are not sufficient data to make a better prediction. Thus the risk is that the well would have only enough head to make a rather small well. However, the cost to enter and perforate the DeChelly should be small. After the casing has been perforated, a static fluid level determined, then the decision can be made whether or not to install a temporary pumping unit for some tests as to sustained deliverability. I believe a completion attempt should be made in this well.

Only a Gamma Ray log (through casing) exists for the DeChelly section of this hole. The depth from the surface of the ground to the top of the DeChelly is 543' and the depth to the base is 1130'. The most permeable DeChelly sands in this area are always in the top 200'--so they should be perforated for sure. I have a water sample I have saved from a sand in the Organ Rock in this well. The sand is from 1385-1405' (K.B. reference). This zone made water while we were

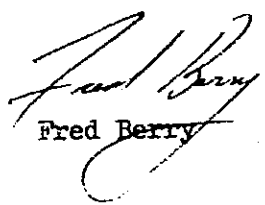
drilling with air and forced us to mud up and drill the rest of the hole with mud. I am giving this water sample to the Water Resources Branch, U. S. Geological Survey, Menlo Park, California for analysis. The chemistry should be somewhat similar to the DeChelly water chemistry at this locality--though probably more saline.

Should a DeChelly water well be deliberately drilled in the Cove-Red Rock area, I recommend that it be located near the road about one or two miles southwest of Red Rock--near the top of the Chinle section. In other words, it should be located in the eastern end of the Cove-Red Rock Valley.

A very good DeChelly water well could be developed by reentering the abandoned test well drilled by Gulf Oil Company (Navajo CS #1, NE/4, NE/4, Sec. 34-T37N-R30E, Apache Co., Arizona)--about 3 miles SW of Red Rock Trading Post. The cost to develop a water well from this abandoned test would be more expensive than the St. Mary 1-30 Ghee-Ateen due to the fact that the casing in this Gulf test hole is about 750' above the top of the DeChelly. The surface elevation is 6046'. Chinle is on the surface; the top of the DeChelly is at 1071' (ground reference). 8 5/8" casing is cemented from 352' (ground ref.) to the surface. The hole would have to be reentered; the cement plugs drilled out; and the hole cleaned out to the base of the DeChelly (about 1700', ground reference). 5 1/2" or 4 1/2" casing would have to be run from the surface to 1700', cemented, and the DeChelly perforated. Slotted casing could be run opposite the DeChelly and the new casing left uncemented if a cheaper completion was desired. The static head for the DeChelly probably would be about 5700-5800'--i.e., 250-350' below ground level. A motor-driven pumping unit would be required. The Cove electrical line now runs along the road about 1/2 mile north of the well. A large capacity well would be the result of such a reentry and recompletion.

There are not enough data on the static head of the DeChelly in the Cove-Red Rock Valley. Great care should be exercised to obtain good static head measurements in any efforts to develop DeChelly water wells in the Cove-Red Rock area.

I have been very interested for nearly 20 years in the chemistry and static head distribution of the DeChelly and all other aquifers in this region. I would be happy to assist in any way in helping to provide a better water supply for the Cove-Red Rock Valley.


Fred Berry

951 Cragmont Ave.
Berkeley, California 94708

(415) 526-2918
(415) 524-0555

24 February, 1975

Curtis Little (originally Union Texas Petroleum),
Lukachukai 1-14, Sec. 14-T37N-R29E, Apache Co., Ariz.

Summary of Completion, Stimulation Attempts and Resulting
Production; Final Plugging

- 3/22/70 Circulated hole with oil. Pressure tested to 1000 psi. Ran cement bond
3/23/70 log. Perf. 3428-36 (KB reference) through oil with 4 4" Hyperjets per
foot. Ran 1 jt. tail pipe with tubing. Set pkr. with bottom of tail
pipe at 3439'. Swabbed hole dry. 25' fillup in 12 hrs.
- 3/24/70 Acidized with 500 gallons (13%) acid (BDA). BDP=2000 psi. Init. SD press.=
2000 psi. SI pressure bled to 1400 psi in 15". Swabbed dry. Swabbed 1.2
BFPH, 50% oil and 50% acid water.
- 3/25/70 Swabbed at about same rate.
- 3/26/70 Acid fraced well with 3000 gal water (frac 60), 500 gal. 28% acid, 5000
gal. water (frac 10). Flushed tbg. with 17 bbls lease crude. Injected
@ 6.5 BPM. Max. press. = 3000 psi. Init. SD press. = 2200 psi; in 15
min., SIP= 2000 psi.
- 3/27- Swabbed for 6 days. Swabbed 5-10 B/d fluid, 1/3rd to 1/2 37.2° oil, remainder
3/1/70 = formation salt water whose total solids = 64,400 ppm (Analysis attached).
Made small amount of gas, TSTM, Analysis attached.
- 3/3-9/15 Shut in for pressure build up survey. Bottom hole SIP = 136 psi after 96
/70 hrs. SI, = 211 pis after 263 hrs. SI.
- 3/15/70 Well SI and suspended.
- 12/9/70 Ran base level temperature survey. Injected small amount of water. Ran
another temperature survey. Determined that perforations took fluid and that
there was no apparent channeling. Well SI and suspended.
- 7/10/71 Attempted sand-water frac. Injected 2000 gal. chem. treated water as
frac pad. Injected approximately 8,000 gals. of water with sand. Well
sanded up.
- 7/12/71 Ran sand pump. Retrieved sand with great difficulty and several sand
pumps. Tried another sand-water frac. Injected 50,000 gal. of water
along, then 21,300 gal. of water containing 1/8 lb/gal of 20/40 frac
sand, then 25,700 gal. of water containing 1/4 lb/gal of 20/40 frac sand.
Tubing flushed with 7,550 gals. of water. Used a total of 104,550 gals.
of water and 9,102 lbs of sand. ISIP= 3300 psi, after 5" = 2800 psi,
after 15" = 2700 psi, after 30" = 2600 psi, after 8 hrs., = 2100 psi,
after 15 hrs. = 1750 psi.
- 7/13/70 Ran temperature Survey. Determined that all of frac job went in perforations.
- 7/15- Swabbed. Final rate @ 5 bbls. per hour, 6% oil, 94% water.
7/17/70
- 7/25- Swabbed. Rate for last 24 hours = approximately 2 B/H, approximately 9-10%.
7/27/71 Well shut in and suspended.
- 2/8/75 Determined fluid level after 3 3/4 years of being shut in = 1150' from
surface. Circulated out fluid with fresh water. Estimate that fluid in hole

was 1/5th oil and the rest was salt water.

2/8- Well plugged and abandoned.
2/9/75

24 February, 1975

History of Plugging

Curtis Little (originally Union Texas Petroleum), Lukachukai 1-14,
1800' FSL, 1900' FWL, Sec. 14-T37N-R29E, Apache Co., Arizona.
El_{KB} = 6220'; El_{gr} = 6209'.

Casing: 202', 24#, K-55, 8 5/8" csg. cemented to surface.
3699', 14#, J-55, 5 1/2" csg. cemented from bottom to 2880' as determined by
cement bond log.
Perf.: 3428-36 (kb ref.) with 4 shots per foot.
Tubing: 116 jts. of 2 7/8" O.D. on surface.

Original Plugging Program Approved by USGS:

100' plug over perforations. 200' plug at casing stub. 300' plug from 800-1100'
(kb ref.), 50' sur. plug with 10' steel marker.

Plugging History:

5/11/74 Red Walsh and Farmington Well Service tried to pull the casing and plug
the well. They were threatened/verbally by three young Navajo men and so they
abandoned their efforts.

2/8/75 Second attempt at plugging the well initiated. Plugging supervised by
Fred Berry.
Farmington Well Service, rigged up on location @ 9:00 A.M.
4 Deadmen set by MoTe, Inc.
Convoyed B-J cement truck, pump truck, pickup, and water truck from Red
Rock to location.
Detailed procedure of pulling and plugging originally worked out by Red
Walsh. Procedure of actual operations directed by Jim Hill, toolpusher
for Farmington Well Service (FWS).
FWS ran in with tubing.
Go International determined fluid level to permit accurate plug spotting.
Fluid level measured @ 1150' from surface.
B-J filled hole with water to surface. Oil flowed out annulus, then salt
water, estimate of 1/3rd to 1/5th oil, rest = salt water.
Hired local Navajo boys to collect all the thread protectors from the pits.
B-J spotted 100' cement plug (50/50 Pozmix) at 3350-3450 (kb ref.) or
3339-3439 (gr. ref.).
FWS ran tubing out of hole, screwed on thread protectors, and laid it
down. Subsequent cement plugs would be run through csg.
B-J drove to Red Rock water hole and filled 110 bbl water carrier. Pump
truck had to go as carrier had no pumps.
FWS rigged up for 5 1/2" csg. Removed gaskets and seals, with considerable
difficulty and delay, that hold 5 1/2" csg. in slips on csg. head.
Sent B-J back to Farmington. It was late in day and it was apparent that
at best we would locate csg. free point and shoot off casing before dark.
B-J left equipment on location.
FWS finally was rigged up and ready to pull on 5 1/2" csg. Pulling immediately
showed limited stretch. Early estimates were that the casing was bound
at a dept from 300-700'. Many attempts were made to work and pull casing,
but it would not budge.

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Mar 6 1975 I made some quick calculations and estimated that the recovery of 500' of
csg. would not be economical. The only alternative suggested to me was

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csg. jacks might be used. They can either free or part the casing. FWS did not have any csg. jacks. In any event, it seemed pointless to me to use Go International to determine free point at such shallow depth--(at a cost of \$450/determination), so I sent them back to town. FWS made a series of measured stretch determinations for me. They shut down for the night, leaving rig on location.

I made arrangements with local Navajo family to watch equipment. I came back myself at 9 P.M. to check that it was OK. Wet snow was beginning to fall.

I went to Cove Trading Post. I studied the Induction and Caliper log for the well. Chinle is on the surface. The hole was relatively in gauge to 700'. From 700'-900', the hole was badly washed out. In some places, caliper is completely off scale. Hole gradually comes back into gauge from 900-950' (top of the DeChelly). Minor hole enlargements began appearing in the 400-500' depth range in the hole.

My own analysis was that Chinle had caved--probably over much of interval from 500-950'. The Chinle is soft claystone, sandstone and siltstone with lime stringers. There is quite a bit of bentonite in the claystone. In the Cove, North Lukachukai-Redrock area, it has washed out on us badly in several wells. Collapse of the Chinle has occurred in an uncased DeChelly water well at Redrock. In addition, there is the possibility that the casing could be stuck differentially in the DeChelly. Similar sticking occurs opposite the Navajo sand at Aneth--the geologic conditions are roughly similar (big permeable sand, potential surface of sand is sub-hydrostatic). While drilling the 2-16 well a mile away from the 1-14, we had differential sticking of the drill collars in the De Chelly. Casing probably is free from 1500 (base of DeChelly) to where it is cemented at 2880' due to nature of rocks, hole caliper, and our history of air drilling in the area.

I called Larry Bedford in Farmington, head of Bedford, Inc. He is the main casing puller in the area. I have tried for over a year to have him pull this well; he has always been too busy. He gave me the formula to calculate the free point from the various stretch determinations. The results I calculated are:

Pull = From 0 to 80,000#, Stretch = $3\frac{1}{2}$ ", Calc. Freepoint = 500'

Pull = From 38,000 to 100,000#, Stretch = $2\frac{1}{2}$ ", Ca. F.P. = 460'

Pull = From 40,000 to 80,000#, Stretch = $1\frac{3}{4}$ ", Ca. FP = 500'

Pull = From 38,000 to 68,000#, Stretch = 1", Ca. FP = 380'

I reviewed the entire situation with Larry Bedford. He told me that he would loan me some casing jacks but that it would be 3 days before we could have them. He told me he did not have any experience in pulling casing in our area and so did not know the particular problems caused by the Chinle. He said he had pulled a lot of casing at Aneth and there the Chinle did not cause trouble--but that it was a problem of differential sticking in the Navajo and other big Jurassic-Triassic aeolian sands. After much talk, he agreed that we probably had cavings. He doubted that casing jacks would do any good. If we could not budge it with 100,000 # of pull, then he doubted that 180,000# (the breaking point of the pipe in tension at the threads) would do any better. He suggested that the only way to treat a case of wall collapse was to perforate right below the free point and try to wash out the annulus--using water and the pumps of the cement truck--while working the pipe. He in essence told me that the best decision would

be based on my own opinion as to how much of the casing would be jammed with cavings. If only one or two sites, then he thought we should go ahead due to the present value of casing. However, if I thought it might be 200-450' of cavings, then he thought I should stop, leave the casing in the ground and plug it.

I concluded that we probably would spend a lot of money and would recover no more than the 500' of casing that the stretch determinations indicated were free. Therefore, I concluded reluctantly that we should leave the casing in the hole and plug it as quickly and cheaply as possible.

I called Mr. Seelinger with the U.S.G.S. at his home and discussed the matter with him. I told him the situation and informed him that we would not be able to recover the casing. I suggested to him that we should leave the well in shape so that the Navajo Tribe easily could reenter it and perforate the DeChelly for a water well. I told him that we had already spotted a 100' cement plug over the perforations. He said that we need only place a 30' surface plug with a marker.

I reviewed the situation with Jim Hill, toolpusher with FWS. I had come to trust his judgement. He advised me that since everything was there on location that we probably should play it safe and run an additional 200' cement plug inside the 5½" and below the DeChelly. His reasoning was that if the Tribe should perforate the DeChelly and if the 100' plug over the Barker Creek perforations was not in place, did not set up, cracked or failed then there would be some oil and salt water escape upwards into the DeChelly water well. He pointed out that if that should happen, regardless of when, the Tribe and the U.S.G.S. would come back to us and require that we move back onto location and set one or more additional cement plugs. I agreed with him that the relatively minor additional cost (\$400) was worth the protection from any future liability.

2/9/75

FWS on location at 8:30 AM. Changed tongs from 5½" back to 2 7/8". Ran tubing in hole.

B-J on location at 10. Spotted cement plug (50/50 Pozmix) from 1750 to 1550 (gr. ref.).

FWS pulled up 100'. I had B-J circulate fresh water in hole so as to clear out any remaining oil and salt water.

FWS pulled up tubing, screwed on thread protectors, and laid it down in truck. Truck had already picked up remaining tubing on ground with winch.

FWS pulled up to within 30' of surface.

B-J spotted 30' cement plug (50/50 Pozmix) 30' below surface to surface.

B-J was dismissed.

10' marker was placed inside 5½" casing on top of braden head;

Curtis Little, 1-14 Lukachukai, 1800' FSL, 1900' FWL, Sec. 14-T37N-R29E, Apache Co., Arizona. El= 6209.

FWS was dismissed.

Snow had melted. B-J stuck all but one of its trucks trying to drive the ½ mile uphill road south of location. FWS could not move the trailer. After about 4 hours of work, all vehicles were freed except for the trailer. That was moved two days later.

116 joints of 2 7/8" tubing with thread protectors were loaded onto trailer and hauled to Farmington. One joint has threads cut with torch and bent. Used as bottom joint for swabbing. All other thread protectors picked up along with valve, bull plugs, etc. for csg. head.

FWS (Allen Construction) will grade out location and fill pits when weather permits. Location then will be reseeded by David Johns of Cove, Arizona using our seed.

Fred Berry

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.
5. LEASE DESIGNATION AND SERIAL NO.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. ☐ OIL WELL ☒ GAS WELL ☐ OTHER

2. NAME OF OPERATOR

Curtis Little, Agent (originally Union Texas Petroleum)

3. ADDRESS OF OPERATOR

c/o St. Mary Parish Land Company;
1010 Denver Center Bldg.; Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)

At surface 1800' FSL, 1900' FWL, 14-37N-29E.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Lukachukai

9. WELL NO.

1-14

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA

Sec. 14-T37N-R29E G.S.E.M.

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, WT, GR, etc.)

6220-KB; 6209-gr.

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

2/8/75 Spotted 100' cement plug (50/50 Pozmix) inside 5½" csg. over perforations from 3359-3439 (ground reference) or 3350-3450 (KB reference).

2/9/75 Spotted 200' cement plug (50/50 Pozmix) inside 5½" csg. from 1550-1750 (gr. ref.).

Spotted 30' cement plug (50/50 Pozmix) inside 5½" csg. from surface to 30' (ground ref.)

10' steel marker cemented inside 5½" csg. on top of braden head with designation:
Curtis Little, 1-14 Lukachukai, 1800' FSL, 1900' FWL, Sec. 14-37N-29E,
Apache Co., Ariz. El = 6209'.

Location will be graded out and cleaned up when weather permits. Location will be re-seeded this spring by local Navajo at Cove, Arizona under our direction using our seed.

18. I hereby certify that the foregoing is true and correct

SIGNED

Frederick A. F. Berry

Agent and part owner

TITLE

DATE 23 Feb., 1975

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

RECEIVED

MAR 01 1975

*See Instructions on Reverse Side

O & G CONS. COMM.

Accepted as Plugging Report

DATE: April 17, 1974

MEMO FROM: W. E. Allen, Director
Enforcement Section

MEMO TO: Lukachukai #1-14
Sec 14-T36N-R29E
Apache County
Permit No. 544

Ewell Walsh called regarding the plugging of the above referenced well. The plugging program is as follows:

150' bottom plug which will cover the perforations and some 50' above. There will be a 200' plug across the casing stub and if the operators are able to cut and pull the casing from a point below the De Chelly, there will be a 200' plug placed across the De Chelly formation. A 30' top plug with a dry hole marker will be placed at the top of the hole. Phil McGrath, U.S.G.S. in Farmington, has approved this program.



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

February 28, 1974

Memo: Bill Allen
From: John Bannister

Re: Union Texas Lukachukai #1-14, Permit 544

Anne Little called today concerning the expiration of the last period of temporary abandonment granted on this well. I told her I felt no further extension should be granted and that as of Monday, March 4, 1974 you will issue a demand that this well be permanently plugged or definite arrangements made with this Commission.

Will you please write to Little, as operator, and see that this is accomplished. I would mention that the Littles are in agreement with my decision, inasmuch as they would like to get this well out of the way.

CERTIFICATE FOR LOAD OIL CREDIT AND
PERMIT TO TRANSPORT RECOVERED LOAD OIL

Operator Curtis J. Little		Address 1600 Broadway, S-1560, Denver, Co 80202	
Federal, State or Indian Lease Number, or lessor's name if fee lease. NOO-C-14-20-2202	Well No. 1-14	Field and Pool Wildcat	County Apache
Location NE SW (1800' FSL, 1900' FWL)		Sec-Twp-Rge or Block & Survey 14-37N-29E	

83.26

Barrels load oil recovered

Oil was purchased from* Permian Corporation	Address Farmington, New Mexico
	Date purchased 8-70

Oil from the lease and well first above described is gathered and transported by:

This report will certify that the number of barrels of load oil, shown above, was recovered from the property first above described; also that this load oil was purchased from the named firm (or lease), and permission is hereby requested for the running of the said number of barrels of oil by the gatherer and transporter.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the operator of the individual (company) and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

RECEIVED

FEB 13 1973

O & G CONS. COMM.

Signature

February 12, 1973

Date

Note: This report required only when load oil was obtained from a source other than the lease on which used.

*Insert lease name, location and pool if oil supplied from a lease.

Date Approved

2-15-73

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By:

WLA

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

Certificate for Load Oil and Permit to
Transport Recovered Load Oil

File Two Copies

Permit No.

544

Form No. 17

CERTIFICATE FOR LOAD OIL CREDIT AND
PERMIT TO TRANSPORT RECOVERED LOAD OIL

Operator <u>CHRIS LITTLE</u>		Address <u>Denver Colorado</u>	
Federal, State or Indian Lease Number, or lessor's name if fee lease.	Well No. <u>#1</u>	Field and Pool <u>Undesignated</u>	County <u>Apache</u>
Location <u>Navajo 1-14</u>		Sec-Twp-Rge or Block & Survey <u>NE/4 SW/4 14-37N-29E</u>	
<div style="border: 1px solid black; padding: 5px; display: inline-block;">83 Barrels load oil recovered</div>			
Oil was purchased from* <u>The Permian Corporation</u>		Address <u>P.O. Box 1702, Farmington, N.M. 87401</u>	
		Date purchased <u>8-21-70</u>	

Oil from the lease and well first above described is gathered and transported by:

The Permian Corporation, Box 1702 Farmington, N.M. 87401

This report will certify that the number of barrels of load oil, shown above, was recovered from the property first above described; also that this load oil was purchased from the named firm (or lease), and permission is hereby requested for the running of the said number of barrels of oil by the gatherer and transporter.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Agent of the
CHRIS LITTLE (company) and that I am authorized by said company to make this report; and that this
report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

RECEIVED

SEP 06 1972

O & G CONS. COMM.

William R. Speer
Signature
Date 8-31-72

Note: This report required only when load oil was obtained
from a source other than the lease on which used.
*Insert lease name, location and pool if oil supplied from a lease.

Date Approved <u>9-6-72</u>
STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION
By: <u>W.B. [Signature]</u>

Permit No. 544

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

Certificate for Load Oil and Permit to
Transport Recovered Load Oil

File Two Copies

Form No. 17

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)		5. LEASE DESIGNATION AND SERIAL NO. NOO-C-14-20-2202	
1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Wildcat		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribe	
2. NAME OF OPERATOR Curtis J. Little		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR P.O. Box 8976, Albuquerque, New Mexico 87108		8. FARM OR LEASE NAME Lukachukai	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1900' FWL, 1800' FSL		9. WELL NO. 1-14	
14. PERMIT NO. Arizona 544		10. FIELD AND POOL, OR WILDCAT Wildcat	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6220 KB		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 14, T37N, R29E	
		12. COUNTY OR PARISH Apache	13. STATE Arizona

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data.

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Sand-water fraced w/42,710 gals water & 17,500 lbs sand at 3000 psi. IR
30 BPM decreasing to 6 BPM - screen out.

Re-fraced w/104,550 gals water & 10,200 lbs sand at 5000-5400 psi. IR
20 BPM.

Swabbed well dry. Recovered 49,686 gals fluid, cut 10% oil.

Shut well in awaiting results of next test well to be drilled about Sept. 1, 1971
within 2 miles of this test well.

This well will probably be used for salt water idposal if commercial
production is established in the area.

18. I hereby certify that the foregoing is true and correct

SIGNED Curtis J. Little
(This space for Federal or State office use)

TITLE Operator

DATE 8-9-71

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE
RECEIVED

Permit 544

*See Instructions on Reverse Side

AUG 10 1971

O & G CONS. COMM.

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Curtis J. Little
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) _____
 3. Well Name Lukachukai No. 1-14
 Location NE SW (1900' FWL, 1800' FSL)
 Sec. 14 Twp. T 37 N Rge. R 29 E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease NOO-C-14-20-2202

5. Field or Pool Name Wildcat

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input checked="" type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>		(OTHER)	REPAIRING WELL	<input type="checkbox"/>
				ALTERING CASING	<input type="checkbox"/>
				ABANDONMENT	<input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Plan to sand-water frac July 10, 1971 in the amount of 120,000 gallons water and 1,180 sx sand.

Swab-back frac water to determine if well is productive.

RECEIVED

JUL 9 1971

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed Curtis J. Little Title Operator Date July 7, 1971

Permit No. 544

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File 5 Copies
 Form No. 25

March 3, 1971

Memo from W. E. Allen, Director
Enforcement Section

Memo to: Union Texas Lukachukai #1-14
NE/4 SW/4 Sec. 14-T37N-R29E
Apache County
Our File #544

Talked with Curtis Little by telephone regarding information that we need relative to him becoming operator on the above referenced well.

Curtis informed me that Buttes Gas and Oil Company no longer had an interest in this particular well. I told him that we would need some evidence that they had disposed of their interest to Union of Texas; and, that we would need a Designation of Operator from Union of Texas and the other ~~partners~~ partners in this operation. I told him that we would also need a drilling bond. He assured me that he would get the necessary information together and forward it along with the bond at an early date.

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Curtis J. Little

2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) _____

3. Well Name Lukachukai No. 1-14

Location NE SW (1900' FSL, 1800' FSL)

Sec. 14 Twp. 37N Rge. 29E County Apache Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease. NOO-G-14-20-2202

5. Field or Pool Name _____

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		ABANDONMENT <input type="checkbox"/>
(OTHER) <u>Temporarily suspend operations</u> <input checked="" type="checkbox"/>		(OTHER) _____ <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Former Operator - Union Texas Petroleum, a Division of Allied Chemical Corp.

This well remains shut-in pending a decision by the working interest owners relative to its abandonment or further testing.

RECEIVED
MAR 03 1971
O & G CONSV. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed Curtis J. Little Title Operator Date 3-1-71 thru 7-1-71

Permit No. 544

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Sundry Notices and Reports On Wells
File Two Copies
Form No. 25

DESIGNATION OF OPERATOR

The undersigned is the record holder of Lease: NOO-C-14-20-2202
(Number or name of lease and description of entire lease acreage)

Township 37N-Range 29 East, G&S R.M.
Sections: 13, 14, 23 and 24

and hereby designates

Name: Curtis J. Little

Address: P. O. Box 8976, 4300 Silver Avenue, S.E.
Albuquerque, New Mexico 87108

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and all regulations, whether Federal, Indian, State, or local, applicable thereto and on whom may be served written or oral instructions in securing compliance with all the applicable lease terms, and rules and regulations of the Oil and Gas Conservation Commission, State of Arizona, with respect to:

(Describe only the acreage to which this designation applies)

SW/4 Section 14-37N-29E

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and with all the applicable rules and regulations of the Oil and Gas Conservation Commission, State of Arizona. It is understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the record holder of the lease remains primarily responsible for and will make full and prompt compliance with all applicable lease terms, the rules and regulations of the Oil and Gas Conservation Commission, State of Arizona, or orders of other appropriate regulatory governmental agencies.

The lessee agrees promptly to notify all proper authorities and appropriate regulatory governmental agencies on any change in the designated operator.

The designated operator agrees to promptly notify all proper authorities of any change of his address during the period in which this designation of operator is in force.

(Date)

(Date)

Lessee
W. T. Blackburn

Designated Operator
Curtis J. Little

(If this Designation of Operator applies to a State of Arizona Oil and Gas Lease, copy of this designation of operator must be filed with the State Land Department.)

RECEIVED

FEB 22 1971

O & G CONS. COMM.

February 1, 1971

Memo from W. E. Allen, Director
Enforcement Section

Memo to Union Texas Lukachukai #1-14
NE/4 SW/4 Sec. 14-T37N-R29E
Apache County
Our File #544

Mr. W. L. Hixon agreed verbally to remove the above well from
confidential status. He also said that he would write a letter
confirming this agreement.

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Union Texas Petroleum, A Division of Allied Chemical Corporation
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) _____
 3. Well Name Lukachukai No. 1-14
 Location NE SW (1900' FWL, 1800' FSL)
 Sec. 14 Twp. 37N Rge. 29E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease N00 C14-20-2202

5. Field or Pool Name _____

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐ PULL OR ALTER CASING ☐
 FRACTURE TREAT ☐ DIRECTIONAL DRILL ☐
 SHOOT OR ACIDIZE ☐ PERFORATE CASING ☐
 REPAIR WELL ☐ CHANGE PLANS ☐
 (OTHER) Temporarily suspend operations ☒

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐ MONTHLY PROGRESS ☐
 FRACTURE TREATMENT ☐ REPAIRING WELL ☐
 SHOOTING OR ACIDIZING ☐ ALTERING CASING ☐
 ABANDONMENT ☐
 (OTHER) _____

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Reference is made to previous report on this form dated November 25, 1970. This well remains shut in pending a decision by the non-operating working interest owners relative to its abandonment or further testing.

RECEIVED

DEC 31 1970

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed W. L. Nixon

Title Dist. Production Mgr. Date 12/28/70

Form No. 544

Form No. 25

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File Two Copies

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Union Texas Petroleum, A Division of Allied Chemical Corporation
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) _____
 3. Well Name Lukachukai No. 1-14
 Location NE SW (1900' FWL, 1800' FSL)
 Sec 14 Twp 37N Rge 29E County Apache Arizona.
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5. Field or Pool Name _____

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NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		ABANDONMENT <input type="checkbox"/>
(OTHER) <u>Temporarily suspend operations</u> <input checked="" type="checkbox"/>		(OTHER) _____	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Reference is made to previous report on this form dated September 28, 1970. Pending future disposition of this well, we conducted a tracer survey on November 16, 1970 as follows:

"MIRU GO International. Ran base temperature & GR log. RU Transwestern tankers. Pumped 67 BW, max. rate 6 BPM @ 600#. Ran radioactive tracer survey & temperature survey. No fluid went below 3432', top part of perforations took all the fluid. Made repeat runs w/temperature log for 4 hrs. Did not see any out of zone movement. Well shut in."

8. I hereby certify that the foregoing is true and correct.

Signed _____

Title District Production Mgr Date 11/25/70

Form No. 544

Form No. 25

RECEIVED
NOV 30 1970
 O & G CENS. UNIT.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File Two Copies

SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Union Texas Petroleum, A Division of Allied Chemical Corporation

2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) _____

3. Well Name Lukachukai No. 1-14

Location NE SW (1900' FWL, 1800' FSL)

Sec. 14 Twp. 37N Rge. 29E County Apache Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease N00-C14-20-2202

5. Field or Pool Name _____

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(OTHER) <u>Temporarily suspend operations</u> <input checked="" type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
ABANDONMENT <input type="checkbox"/>	
(OTHER) _____	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Reference is made to previous report on this form dated September 28, 1970. All partners in this well have now been formally requested to approve its abandonment. Several approvals are still pending at this date and well remains shut in.

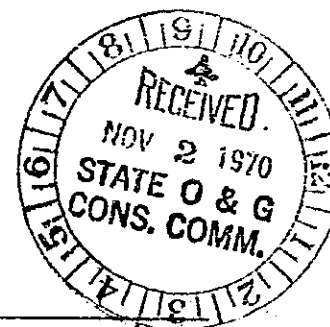
8. I hereby certify that the foregoing is true and correct

Signed W. L. Hixon

Title District Prod. Manager Date 10/27/70

Permit No. 544

Form No. 25



STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Sundry Notices and Reports On Wells
File Two Copies

SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Union Texas Petroleum, A Division of Allied Chemical Corporation
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) _____
 3. Well Name Lukachukai No. 1-14
 Location NE SW (1900' FWL, 1800' FSL)
 Sec. 14 Twp. 37N Rge. 29E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease N00-C14-20-2202

5. Field or Pool Name None

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		ABANDONMENT <input type="checkbox"/>
(OTHER) <u>Temporarily suspend operations</u> <input checked="" type="checkbox"/>		(OTHER) _____ <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

On August 19, 1970, 116 joints of 5-1/2" 14# J-55 ST&C casing (3696.97') were set at 3699' and cemented with 150 sx 50-50 Pozmix, 2% gel, 10% salt mud. The Chaetetes zone from 3428-36 was perforated with four Hyperjets per foot and 110 joints 2-7/8" OD tubing were set at 3429' with Baker Model EA Retrievalmatic Packer 1 joint above. Swabbed hole dry. On August 23, perforations were acidized with 500 gals. Dowell BDA. During the period from August 25 to September 1, 1970, the well was swab tested daily as shown on the attached reports. On September 1, 1970 a bottom hole pressure build-up test was started; this was completed on September 15. BHP data are shown on the attached reports. Well shut in pending abandonment at a future time.

PLEASE CONSIDER SWAB TEST DATA AND PRESSURE DATA CONFIDENTIAL UNTIL ADVISED OTHERWISE.

RECEIVED 9-30-70

8. I hereby certify that the foregoing is true and correct.

Signed W. L. Hixon

Title District Prod. Mgr. Date 9/28/70

Form No. 544

Form No. 25

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Sundry Notices and Reports On Wells
 File Two Copies

Lukachukai #1-14, NE SW Section 14-T37N-R29E, North Lukachukai Area, Apache Co., Arizona
1970 - Continued - Page 5

9/8 - Continued:

9/6 Shut in for bottom hole pressure buildup.
9/7 Shut in for bottom hole pressure buildup.
9/8 Shut in for bottom hole pressure buildup.
9/9 Shut in for bottom hole pressure buildup.
9/10 Shut in for bottom hole pressure buildup.
9/11 Shut in for bottom hole pressure buildup.
9/12 Well shut in.
9/13 Well shut in.
9/14 Well shut in.

9/15 At depth of 3395', pressures were as follows:

108 hrs.	140#	168 hrs.	170#	228 hrs.	198#
118 "	147#	178 "	175#	238 "	202#
128 "	152#	188 "	180#	248 "	207#
138 "	157#	198 "	184#	258 "	211#
148 "	161#	208 "	189#	263 "	211#
158 "	166#	218 "	193#		

Gas gradient .010. No fluid in hole. Pulled pressure bomb at 11:45 a.m., 9/12/70.

9/16 Well shut in. DROP FROM REPORT until further activity.

Lukachukai #1-14, NE SW Sec 14-T37N-R29E, North Lukachukai Area, Apache Co., Arizona
1970 - Continued - Page 4

8/31- 8/30 - Continued:

9:00-10:00 9.62 BF
10:00-11:00 3.34 "
11:00-12:00 6.68 "
12:00-1:00 1.25 "
1:00-2:00 2.51 "
2:00-3:00 1.67 "
3:00-4:00 2.51 "
4:00-4:30 2.51 "

Swabbed total of 30.09 BF in 7-1/2 hrs., 33% oil, 67% water (10.03 BO and 20.06 BW). 17.64 BW to recover.

8/31 Left well open to atmosphere. Rigged up swab and found fluid level at 250'.
Started swabbing at 9:00 a.m.:

9:00-10:00 2.92 BF 90% oil
10:00-11:00 2.08 " 15% "
11:00-12:00 3.75 " 15% "
12:00-1:00 4.56 " 15% "
1:00-2:00 2.51 " 20% "
2:00-3:00 8.35 " 25% "
3:00-4:00 5.85 " 30% "
4:00-5:00 6.68 " 30% "
5:00-5:30 1.67 " 33% "

Swabbed total of 38.37 BF in 8-1/2 hrs., 11.07 BO and 27.30 BW. Produced 9.66 bbls. of new water.

9/1 SI tubing pressure 75#. Rigged up swab and found fluid level 360' above perforations. Started swabbing at 9:00 a.m.:

9:00-10:00 5.85 BF, 75% oil
10:00-11:00 5.43 " 40% "
11:00-12:00 5.01 " 25% "
12:00-1:00 3.34 " 25% "
1:00-2:00 4.58 " 25% "
2:00-3:00 4.17 " 25% "
3:00-4:00 2.51 " 25% "
4:00-5:00 2.51 " 30% "
5:00-5:30 1.67 " 30% " (35.07 BF in 8-1/2 hrs.)

Shut down overnight.

9/2 SI tubing pressure 80#. Rigged up swab and found fluid level 50' above perforations. Started swabbing at 9:00 a.m.:

9:00-10:00 .6 BF, 90% oil.
10:00-11:00 .6 BF, 90% oil
11:00-12:00 .8 BF, 33% oil

Went in hole w/bottom hole pressure bomb. SI at 12:45 p.m., 9/1/70. On bottom w/ bomb at 1:15 p.m. w/180 hr. clock.

9/3 Shut in for bottom hole pressure buildup.

9/4 Shut in for bottom hole pressure buildup.

9/8 9/5 Pulled bottom hole pressure bomb, and re-ran. At depth of 3395', pressures were as follows:

30 min.	61#	17 hrs.	86#	48 hrs.	111#
1 hr.	64#	18 hrs.	88#	52 hrs.	114#
2 hrs.	66#	19 hrs.	90#	56 hrs.	116#
4 hrs.	68#	20 hrs.	91#	60 hrs.	118#
8 hrs.	70#	22 hrs.	93#	66 hrs.	121#
12 hrs.	73#	24 hrs.	96#	72 hrs.	124#
14 hrs.	75#	28 hrs.	98#	78 hrs.	127#
15 hrs.	80#	32 hrs.	100#	84 hrs.	131#
16 hrs.	83#	36 hrs.	103#	90 hrs.	134#
		40 hrs.	106#	96 hrs.	136#
		44 hrs.	109#		

Lukachukai #1-14, NE SW Sec 14-T37N-R29E, North Lukachukai Area, Apache Co., Arizona
1970 - Continued - Page 3

- 8/25 SITP 20#. Ran swab, found fluid level 600' above perforations. Pulled swab from bottom, recovered 600' fluid, half oil and half acid water. Second run, 400' fluid, acid water; third run, 50' fluid, oil; 4th run, 25' fluid, oil. Shut down for 30 min., made run w/swab, recovered 25' fluid. Shut down for 1 hr., made run w/swab, recovered 100' fluid. Shut down for balance of day. 100' fluid = .58 bbl.
- 8/26 SITP 15#. Ran swab, found fluid level 600' above perforations.
9:00 a.m., swabbed from bottom, 60% oil, 40% water.
9:15 a.m., 2nd run, 400' fluid, 25% oil, 75% water.
9:25 a.m., 3rd run, 150' " 25% " 75% "
10:00 a.m., 4th run, 150' " 40% " 60% "
10:30 a.m., 5th run, 50' " 50% " 50% "
11:15 a.m., 6th run, 75' " 80% " 20% "
Rigged up Dowell, acid fraced as follows: 3000 gallons water frac 60, 5000 gallons 28% acid, 5000 gallons water frac 10. Flushed tubing w/17 bbls. lease crude. Average tubing pressure 2800#; average injection rate 6.5 BPM; maximum pressure 3000#; initial shut down pressure 2200#; in 15 min., SIP 2000#. Shut in overnight. (Total treatment consisted of 316 bbls. water, 17 bbls. lease crude.)
- 8/27 550# pressure at 10:50 a.m. Opened well, bled pressure to zero, flowed estimated 10 bbls. water. Rigged up swab, started swabbing at 11:30 a.m. From 11:30 a.m. to 1:30 p.m. recovered 57 bbls. load water, fluid level 800' from surface, wellhead grindout 2% oil. Swab gauges:
1:30-2:30 p.m. 30.06 BLW, 2% oil
3:30 p.m. 15.03 " 3% "
4:30 p.m. 16.70 " 4% "
4:30-6:00 p.m. 22.50 " 4% "
Fluid level is fluctuating between 1000' and 1500' from surface. (Have recovered total of 151 bbls. water, 182 bbls. left to recover.)
- 8/28 SITP 70#, bled pressure, ran swab, fluid level 800' above perforations.
8:45-9:45 swabbed 16.70 BF, 4% oil (.67 BO)
9:45-10:45 " 16.70 " 10% " (1.67 "
10:45-11:45 " 16.70 " 20% " (3.34 "
11:45-12:45 " 11.69 " 20% " (2.24 "
12:45-1:45 " 11.69 " 20% " (2.24 "
1:45-2:45 " 14.20 " 25% " (3.55 "
2:45-3:45 " 10.86 " 25% " (2.72 "
3:45-4:45 " 11.69 " 25% " (2.92 "
4:45-5:45 " 10.02 " 30% " (3.00 "
During above swabs, fluid level ranged from 800' to 1000' above perforations. Oil very gassy. Swabbed a total of 120.25 BF in 9 hrs., 22.35 BO. 84 BLW to recover.
- 8/31 8/29 Left well open to atmosphere. Rigged up swab and found fluid 700' above perfs. Started swabbing at 9:30 a.m.:
9:30-10:30 11.27 BF
10:30-11:30 13.36 "
11:30-12:30 11.69 "
12:30-1:30 8.35 "
1:30-2:30 8.35 "
2:30-3:30 10.02 "
3:30-4:30 5.01 "
4:30-5:30 3.34 "
71.39 bbls. total fluid, 35% oil, 65% water (24.99 BO, 46.40 BW), oil gravity 37.2 @ 60°.
- 8/30 Left well open to atmosphere. Rigged up swab and found fluid level at 600'. Started swabbing at 9:00 a.m.:

September 17, 1970

Memo from W. E. Allen
Director, Enforcement Section

Memo to Union Texas Petroleum Lukachukai #1-14 Navajo
NE/4 SW/4 Sec. 14-T37N-R29E
Apache County
Our File #544

Called Union Texas for information on this well. Mr. Hixon informed me that following the initial swab test which indicated 24 barrels of 38° gravity oil and 48 barrels of water in 24 hours, a bottom hole pressure bomb was run to a depth of 3395'. One hour after the bomb was run and the well shut in, the bottom hole pressure was 64 psi. Following 263 hours shut in period, the bottom hole pressure was 211 pounds. During this 263 hour shut in period, the bottom hole pressure was increasing at a rate of approximately 4/10 of a pound per hour. Apparently, the maximum bottom hole pressure was not reached during the period of time the bomb was in the hole. Gas gradient is .010 per foot.

The well is temporarily shut in pending further bottom hole pressure testing. Mr. Hixon said that he did not think the well would be a commercial producer; however, they wish to test this formation further in this hole for they have tentative plans of drilling another well in this area.

September 2, 1970

Memo to Union Texas Lukachukai #1-14
NE/4 SW/4 Sec. 14-T37N-R29E
Apache County
Our File #544

Memo from W. E. Allen
Director, Enforcement Section

Talked with Curtis Little this date. They set 5-1/2" casing at 1 foot off bottom. Swab tested 24 barrels of oil (38° gravity) and 48 barrels of water in 24 hours. Ran bottom hole pressure ~~pump~~ and shut well in at 1 p.m. September 1 to take 7-day pressure buildup.

WA

August 20, 1970

Samples from the Union Texas, #14 Lukachukai
Sec. 14-37N-29E - Apache Co. Arizona have
been received by the Cut. These samples are
Tite at this time. Permit # 544.

Jo Ratcliff
FOUR CORNERS SAMPLE CUT

BASIN GAS TESTING SERVICE
P. O. Box 183
Flagstaff, Arizona - 86001

544

WATER ANALYSIS

Analysis No. 189

Date August 31, 1970

Operator Union Texas

Well Name Navajo 1-1A

County Apache

State Arizona

Date Sampled Aug. 29, 1970

by C. Little

Formation water from Swabbed Fluid

	ppm	epm
Sodium	<u>11,155</u>	<u>485</u>
Calcium	<u>9,840</u>	<u>492</u>
Magnesium	<u>2,080</u>	<u>171</u>
Iron	<u>24</u>	<u>1</u>
Chloride	<u>39,400</u>	<u>1111</u>
Bicarbonate	<u>250</u>	<u>4</u>
Sulfate	<u>1,650</u>	<u>34</u>
Carbonate	<u>0</u>	
Hydroxide	<u>0</u>	

pH 6.2

Sp. Gr. 1.063 at 60 °F.

Resistivity 85 ohm-cm at 89 °F.

Total Solids (Calc) = 64,339 ppm

544

BASIN GAS TESTING SERVICE
P. O. Box 133
Florin Vista, New Mexico - 87415

Analysis No. 191

Date: September 5, 1970

Operator - Union Texas

Well Name - Navajo H4

Location - Apache Co., Arizona

Date Secured - 8/23/70

Gas from perforations - 5½ csg.

COMPONENT	MOL %	AIR FREE MOL %	G. P. M.
Nitrogen	34.04	21.21	
Oxygen	4.37		
Carbon Dioxide	.71	.90	
Methane	51.00	65.28	
Ethane	7.42	9.50	
Propane	2.07	2.65	0.562
I-Butane	.16	.20	.052
N-Butane	.10	.13	.031
I-Pentane	.02	.02	.007
N-Pentane	.03	.03	.010
Hexane $\frac{1}{2}$.08	.08	.029
TOTALS	100.00	100.00	.707

SPECIFIC GRAVITY - 14.696 lbs./sq. in. @ 60° F. - Calculated .750

HEATING VALUE - B. T. U. per cu. ft. - Dry Basis 14.696 lbs./sq. in. @ 60° F.
Calculated 911

CA-20

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering
DALLAS, TEXASPage No. 1

544

CORE ANALYSIS RESULTS

Company Union Texas Petroleum Formation Barker Creek File RP-3-2431
 Well # 1-14 Lukachuaki Core Type Dia. Conv. 4" Date Report 8-16-70
 Field Wildcat Drilling Fluid Analysts Mohl
 County Apache State Arizona Elev. 6215 GL Location NE SW Sec 14 - T37N - R29E

Lithological Abbreviations

Lithological Abbreviations									
SAND-SD SHALE-SH LIME-LM	ODOLMITE-ODL CHERT-CH GYPSUM-GYP	ANHYDRITE-ANNY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY-SBY SHALY-SHY LIMY-LMY	FINE-FN MEDIUM-MED COARSE-CSE	CRYSTALLINE-XLM GRAIN-GRN GRANULAR-GRNL	BROWN-WRN GRAY-GY VUGGY-VGY	SLIGHTLY-SLT VERY-V/ WITH-W/	FRAG LAMINATION-LAM STYLOLITIC-STY	
SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY'S Max. 900	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS			
				OIL	TOTAL WATER				
1	3426-67	69.	4.3	7.2	4.6	65.9	Ls, gry, suc, vert frac		
2	3427-28	5.6*		10.0	3.0	74.5	Ls, gry, suc, vert frac		
3	3428-29	1.7*		14.6	7.9	62.6	Ls, gry, suc, vert frac		
4	3429-30	22..	6.8	13.4	10.1	40.2	Ls, gry, suc		
5	3430-31	5.9	4.2	13.6	10.9	41.4	Ls, gry, suc		
6	3431-32	39..	31.	14.6	12.8	37.4	Ls, gry, suc		
7	3432-33	3.6	2.9	12.1	10.9	34.8	Ls, gry, suc		
8	3433-34	1.0	0.9	77.0	2.7	55.1	Ls, gry, suc		
9	3434-35	0.2*		6.3	4.1	43.8	Ls, gry, suc, vert frac		
10	3435-36	<0.1*		6.4	2.9	44.3	Ls, gry, suc, vert frac		
11	3436-37	<0.1*		5.0	0.0	45.4	Ls, gry, suc, vert frac		

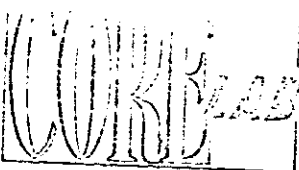
* Denotes plug permeability

Additional permeabilities

3426-27	68.	1.4
3432-32 1/2	22.	2.7
3434-34 1/2	7.0	4.4
3434 1/2-35	17.	1.2

544

CORE LABORATORIES, INC.



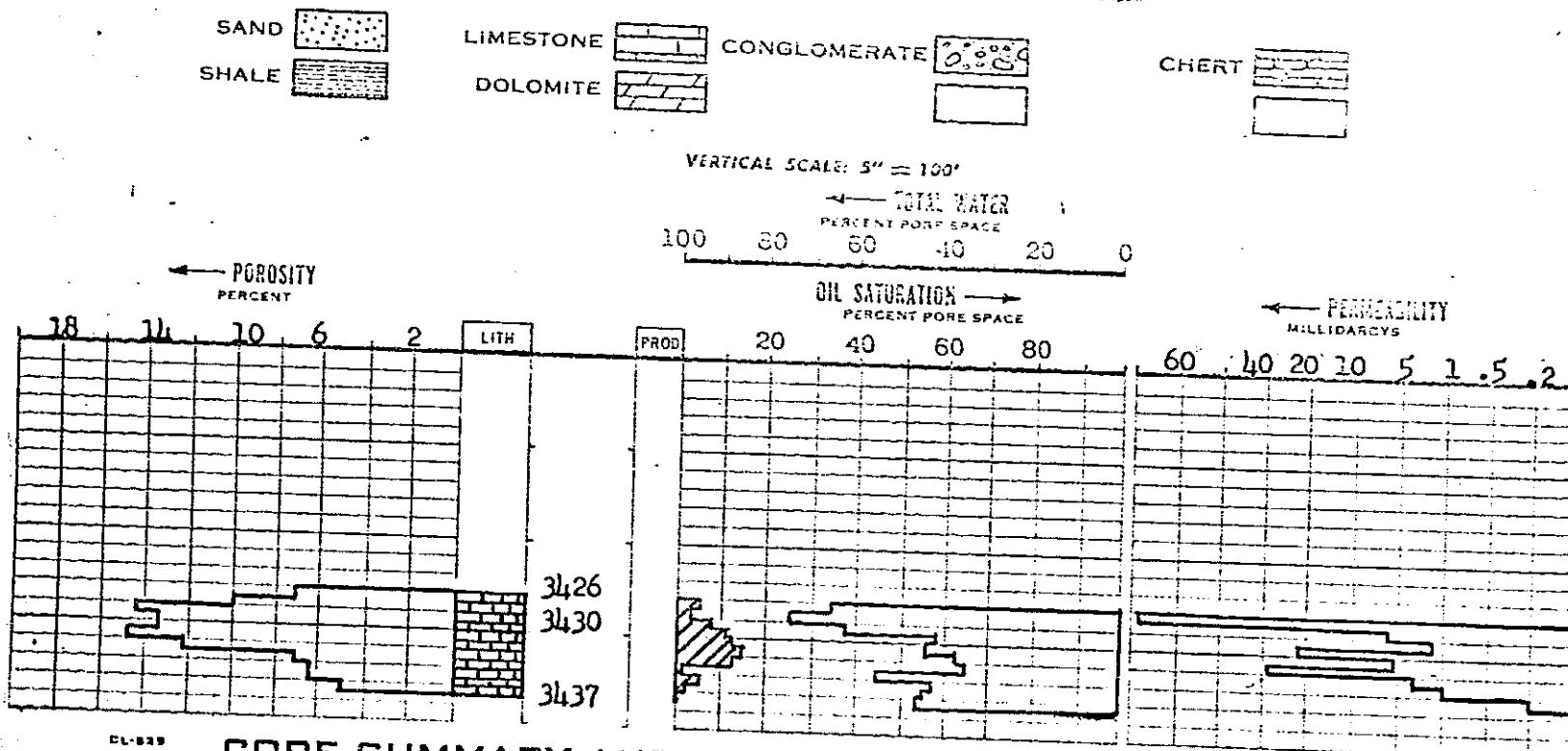
Petroleum Reservoir Engineering

544

COMPANY Union Texas Petroleum DATE ON 8-14-70 FILE NO. RP-3-2431
 WELL # 1-14 Lukachuaki DATE OFF 8-24-70 ENGRS. Mohl
 FIELD Wildcat FORMATION Barker Creek ELEV. 6215 GL
 COUNTY Apache STATE Arizona DRLG. FLD. _____ CORES Dia. Conv.
 LOCATION NE SW Sec 14-T 37N- R 29E REMARKS Whole Core Analysis

COMPLETION COREGRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME AND DEPTH INTERVAL: Barker Creek - 3426.0 - 3433.0 feet

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	7	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	51
FEET OF CORE INCLUDED IN AVERAGES	7	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	30 (e)
AVERAGE PERMEABILITY: MILLIDARCY	20.97	OIL GRAVITY: ρ_{API}	37 (e)
PRODUCTIVE CAPACITY: MILLIDARCY-Feet	146.8	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT	12.2	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.30 (e)
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	10.8	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	509

Calculated maximum solution gas drive recovery is _____ barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is _____ barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)

(c) Calculated (e) Estimated (m) Measured (*) Refer to attached letter.

INTERPRETATION OF DATA

3426.0 - 3433.0 feet - Believed to have oil productive possibilities after successful artificial stimulation. Water saturations higher than normal, which could indicate some initial water cut.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

Analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

August 12, 1970

Memo from W. E. Allen

Memo to Union Texas Lukachukai #1-14 Navajo
NE/4 SW/4 Sec. 14-T37N-R29E
Apache County
Our File #544

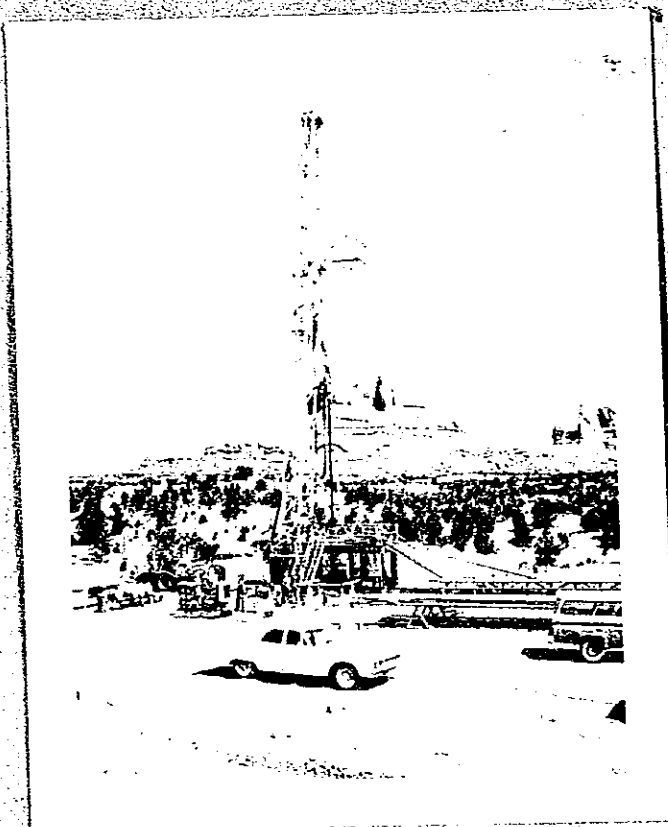
When I was on location on August 12, 1970, they were drilling at 2911' in the Hermosa. Curtis Little is the geologist on this well and Tom Adair is the consulting petroleum engineer. Plans call for coring the Reef section of the Pennsylvania from approximately 3500' to 3620'. In discussing drilling costs in this area I was told that the bit presently in the hole was a Hughes type J-44 and had made a total of 1400' at this time. Another 600' was expected from this bit. Curtis said that since Hughes had brought out this J series, four bits were the average on the 4000' holes in this area.

WELL SITE CHECK

Contractor Signal Well Service By WGA
 Spud date 8-2-70 Date 8-11-70
 Type Rig Teco Rotary Cable ☒ Person(s) Contacted Curtis Little
 Samples _____ Tom Adair (Consulting Eng)
 Pipe 8 1/4" @ 202 ft. Cemented w/ 1500 psi Present Operations Drilling at
 Water Zones _____ 3911 - Hermosa Form.
 Lost Circ. Zones _____ Drilling with Air
 Formation Tops _____ Mud
 Cores, Logs, DST Will cut approx.
120' Core F/ 3500' to 3620' Size Hole 6 1/4
 Crews 3 - F/ Farmington Size Drill Pipe 3 1/2
 No. Bit 2 Type Bit Hughes J-44
 Formation _____ Drilling Rate _____
 Lithology _____

REMARKS, PHOTO, MAP

To Cove
 1.0 mi
 Location
 2.1 mi
 1.2 mi
 Red Rock
 7 mi
 To Shiprock
 Dineh B. Isayah Field
 Location 11.8 mi West & North of Red Rock Trading Post.



WELL NAME Kukae hubi #1-14
 NE/SW 14-37N-29E

Permit No. 544
 Confidential Yes No

WELL SITE CHECK

Contractor Signal Oilfield Serv. Person(s) Contacted Sid Williams
Spud date 8-2- By J. B. WBA
Type Rig EMSCO Rotary Cable ✓ Date 8-6-
Present Operations Drilling
Samples _____
Pipe 12 1/4" hole 8 5/8" at 200' cemented w/ 1500' drilling with Air Mud ✓
Water Zones _____ Size Hole 7 1/4
Lost Circ. Zones _____ Size Drill Pipe 3 1/2
Formation Tops _____ Type Bit _____
Cores, Logs, DST _____ No. Bit _____ Drilling Rate _____
Formation De Chelly
Crews _____ Lithology _____

REMARKS, PHOTO, MAP

Plug down 8-3-70

8-6-70 Drtg at 1500'

UNION TEXAS PET. DIV.

28 WELL NAME #1-14 KatakachukaiPermit No 544
Confidential: Yes No

DESIGNATION OF OPERATOR

Indian Affairs

The undersigned is, on the records of the Bureau of ~~Land Management~~, holder of lease

DISTRICT LAND OFFICE: Farmington, New Mexico
SERIAL NO.: N00-14-20-2202

and hereby designates

NAME: Union Texas Petroleum, A Division of Allied Chemical Corporation
ADDRESS: 1010 Lincoln Tower, Denver, Colorado 80203

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 37N-29E, G.S.R.M.
All of Sections 13, 14, 23 and 24

Containing 2,560 acres, more or less
Apache County, Arizona

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

BUTTES GAS AND OIL COMPANY

BY: *Robert W. Peterson*

(Signature of lessee)

420 C. A. Johnson Building
Denver, Colorado 80202

July 22, 1970

(Date)

(Address)

DESIGNATION OF OPERATOR

Indian Affairs

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Farmington, New Mexico
SERIAL NO.: N00-14-20-2202

and hereby designates

NAME: Union Texas Petroleum, A Division of Allied Chemical Corporation
ADDRESS: 1010 Lincoln Tower, Denver, Colorado 80203

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 37 North, Range 29 East, G.S.R.M.
All Sections 13, 14, 23, 24

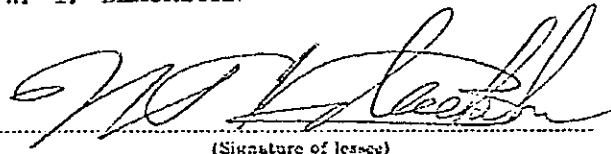
Containing 2,560 acres, more or less, Apache County, Arizona

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

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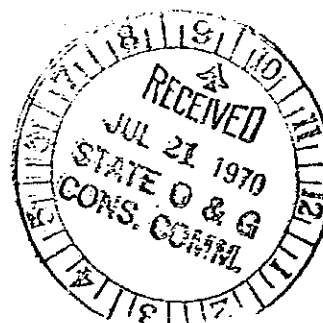
W. T. BLACKBURN


(Signature of lessee)

1650 Denver Club Building
Denver, Colorado 80202
(Address)

(Date)

JUL 15 1970



APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

Union Texas Petroleum, A Division of Allied Chemical Corporation
NAME OF COMPANY OR OPERATOR

Suite 1010, 1860 Lincoln Street Denver Colorado 80203
Address City State

Not yet selected; will advise later before drilling commences.
Drilling Contractor

Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor N00-14-20-2202	Well number Lukachukai #1-14	Elevation (ground) 6215
Nearest distance from proposed location to property or lease line: 1800 feet	Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: N/A (none on lease) feet	
Number of acres in lease: 2560	Number of wells on lease, including this well, completed in or drilling to this reservoir: One	
If lease, purchased with one or more wells drilled, from whom purchased: N/A	Name	Address
Well location (give footage from section lines) 1900' FWL, 1800' FSL	Section—township—range or block and survey Section 14-T37N-R29E	Dedication (Comply with Rule 105) 80 acres
Field and reservoir (if wildcat, so state) Wildcat	County Apache	
Distance, in miles, and direction from nearest town or post office 8 miles west, 1/2 mile north of Red Rock, Arizona		
Proposed depth: 3900 feet	Rotary or cable tools Rotary	Approx. date work will start August 1, 1970
Bond Status Blanket bond filed	Organization Report On file X Or attached	Filing Fee of \$25.00 Attached X

Remarks: Operator proposes to drill +225' surface hole, set 8-5/8" casing with +150 sx cement; then drill 7-7/8" hole to TD where IES, SNP and BHC-Sonic-GR logs will be run. Cores and DST's will be taken as shows warrant. If commercial production is indicated, 4-1/2" casing will be run and cemented with 250 sx. Zones of interest will be perforated and stimulated as quired.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Production Manager of the Union Texas Petroleum (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

Date

Permit Number: 544

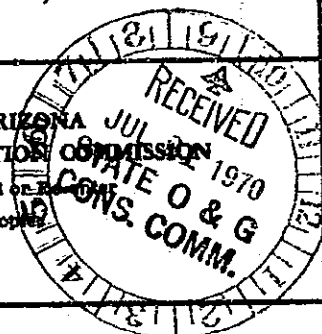
Approval Date: 7-22-70

Approved By: John Benninger by [Signature]

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

Form No. 3

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Application to Drill or Re-Enter
File Two Copies



(Complete Reverse Side)

1. Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
3. All distances shown on the plat must be from the outer boundaries of the Section.
4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO X
5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES X NO _____ If answer is "yes," Type of Consolidation Operating Agreement
6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner Buttes Gas & Oil Co.	38.88%	Land Description Sections 13, 14, 23 and 24, T37N, R29E
W. T. Blackburn	61.12%	Apache County, Arizona

CERTIFICATION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name W. L. Hixon

Position District Production Manager

Company Union Texas Petroleum

Date July 20, 1970

I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed Refer to attached plat

Registered Professional Engineer and/or Land Surveyor Refer to attached plat

Certificate No. Refer to attached plat

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
8-5/8"	24#	J-55	0	225	0 - 225	+150
4-1/2"	10.5#	J-55	0	3900	2600 - 3900	+250

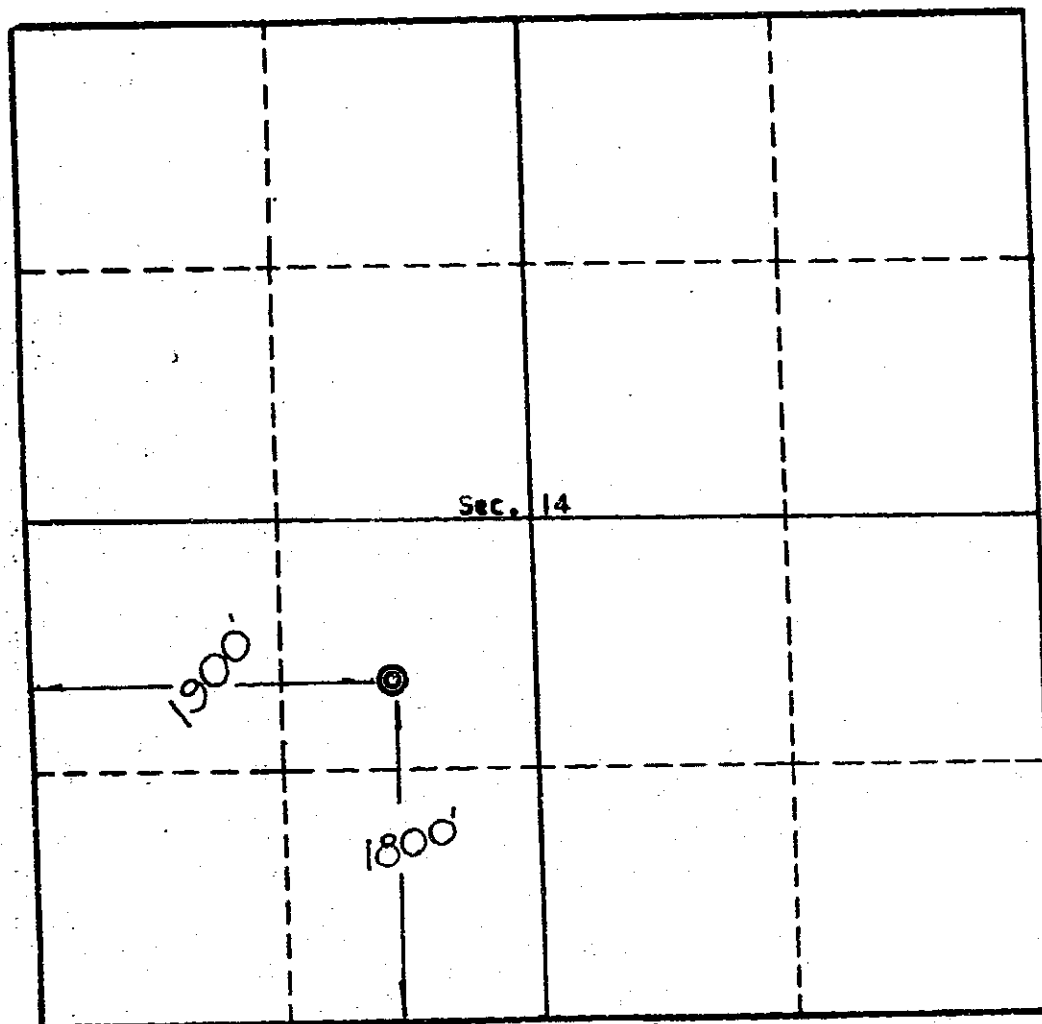
Company UNION TEXAS PETROLEUM

Well Name & No. Lukachukai #1-14

Location 1800 feet from the South line and 1900 feet from the West line.

Sec. 14, T. 37 N., R. 29 E., G. & S. R. M., County Apache, Arizona

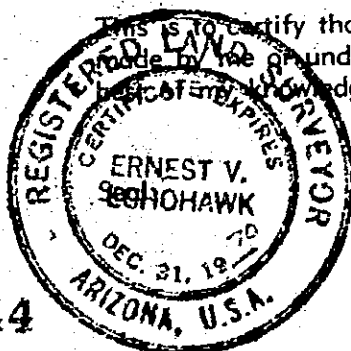
Ground Elevation 6215



Scale, 1 inch = 1,000 feet

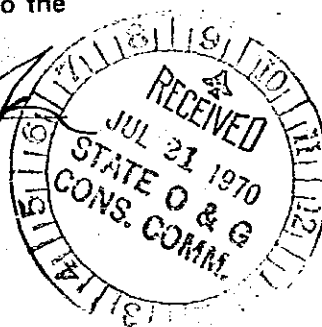
Surveyed July 12, 1970

This is to certify that the above plat was prepared from field notes of actual surveys made by me under my supervision and that the same are true and correct to the best of my knowledge and belief.



544

Ernest V. Echohawk
Ernest V. Echohawk
Registered Land Surveyor
Arizona Registration No. 2311





PERMIT TO DRILL

This constitutes the permission and authority from the
OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

To: **UNION TEXAS PETROLEUM**
(OPERATOR)

to drill a well to be known as

UNION TEXAS PETROLEUM LUKACHUKAI #1-14 NAVAJO (2202)
(WELL NAME)

located **1900' FWL - 1800' FSL**

Section **14** Township **37N** Range **29E**, **APACHE** County, Arizona.

The **E/2 SW/4** of said
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this **22nd** day of **JULY**, 19 **70**.

OIL AND GAS CONSERVATION COMMISSION

By *John Bannister*
EXECUTIVE SECRETARY

PRIOR TO BEING ALLOWED TO PRODUCE THIS WELL
YOU MUST BE IN FULL COMPLIANCE WITH RULE
105, SECTION A THRU G (SPACING), WITH RESPECT
TO THE PRODUCT TO BE PRODUCED.

PERMIT N° 544

RECEIPT NO. 2578
API NO. 02-001-20134

State of Arizona
Oil & Gas Conservation Commission

Permit to Drill

FORM NO. 27

SAMPLES ARE REQUIRED



UNITED STATES FIDELITY AND GUARANTY COMPANY

ALBUQUERQUE BRANCH OFFICE
PETER DIGANGI, JR., CPCU, MANAGER
SAN PEDRO PARK - SUITE 102
2201 SAN PEDRO DRIVE, N.E.
ALBUQUERQUE, NEW MEXICO 87110
TELEPHONE: 505/265-7854

March 24, 1976

RECEIVED

MAR 26 1976
O & G CONS. COMM.

JAMES A. LYONS
SUPT. OF CLAIMS

File Ref: 01-0130-259-71

State of Arizona
Oil & Gas Conservation Commission
8686 N. Central Avenue
Phoenix, Arizona

Re: LITTLE, CURTIS J. - Oil & Gas Lease Performance Bond -
\$5,000. - Permit #544 - Effective March 5, 1971.

Gentlemen:

This is our request for release of our liability in accordance with the terms of the referenced bond.

Please acknowledge receipt of this request and indicate the effective date of release on the attached copy of this letter.

Sincerely,

Jean Westfahl

Jean Westfahl
Fidelity-Surety Department

jw

Receipt Acknowledged:

State of Arizona, Oil & Gas Conservation Commission

By *W.E. Allen*

Cancellation effective date 3-26-76

CANCELLED

DATE 3-26-76 cc: Western Assurance & Realty Corp., Albuquerque, New Mexico

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. 01-0130-259-71

That we: Curtis J. Little

of the County of Bernalillo in the State of New Mexico

as principal, and United States Fidelity and Guaranty Company

of Baltimore, Maryland

AUTHORIZED TO DO BUSINESS WITHIN the State of Arizona.

as surety, are held and firmly bound unto the State of Arizona and the Oil and Gas Conservation Commission, hereinafter referred to as the "Commission", in the penal sum of Five Thousand dollars (\$5,000.00) lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The conditions of this obligation are that, whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following described land situated within the State, to-wit:

SW/4 of Section 14, Township 37 North, Range 29 East, Apache County, Arizona

(May be used as blanket bond or for single well)

NOW, THEREFORE, if the above bounden principal shall comply with all the provisions of the Laws of this State and the rules, regulations and orders of the Commission, especially with reference to the requirements of A.R.S. §27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil and Gas Conservation Commission all notices and records required by said Commission, then in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, this obligation is void; otherwise it shall remain in full force and effect.

Whenever the principal shall be, and declared by the Oil and Gas Conservation Commission in violation of the Laws of this State and the rules, regulations and orders of the Commission, the surety shall promptly:

1. Remedy the violation by its own efforts, or
2. Obtain a bid or bids for submission to the Commission to remedy the violation, and upon determination by the Commission and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Commission, and make available as work progresses sufficient funds to pay the cost of remedying the violation; but not exceeding, including other costs and damages for which the surety may be liable hereunder, the amount set forth in the first paragraph hereof.

Liability under this bond may not be terminated without written permission of this Commission.

WITNESS our hands and seals, this 5th day of March, 1971

WITNESS our hands and seals this 5th day of March, 1971

UNITED STATES FIDELITY AND GUARANTY COMPANY

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved Date

3-18-71

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By

W. A. John Bannister

Permit No. 544

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

Bond

File Two Copies

Form No. 2

CERTIFIED COPY

GENERAL POWER OF ATTORNEY

No. 79188

Know all Men by these Presents:

That UNITED STATES FIDELITY AND GUARANTY COMPANY, a corporation organized and existing under the laws of the State of Maryland, and having its principal office at the City of Baltimore, in the State of Maryland, does hereby constitute and appoint

Cecile H. Bowers

of the City of Albuquerque, State of New Mexico
its true and lawful attorney ~~and its true and lawful attorney~~

for the following purposes, to wit:

To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said UNITED STATES FIDELITY AND GUARANTY COMPANY, a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said UNITED STATES FIDELITY AND GUARANTY COMPANY, through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said

Cecile H. Bowers

may lawfully do in the premises by virtue of these presents.

In Witness Whereof, the said UNITED STATES FIDELITY AND GUARANTY COMPANY has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its Vice-President and Assistant Secretary, this 24th day of May, A. D. 19 68

UNITED STATES FIDELITY AND GUARANTY COMPANY.

(Signed) By John T. West
Vice-President.

(SEAL) (Signed) E. D. Bangs
Assistant Secretary.

STATE OF MARYLAND, }
BALTIMORE CITY, } ss:

On this 24th day of May, A. D. 19 68 before me personally came John T. West, Vice-President of the UNITED STATES FIDELITY AND GUARANTY COMPANY and E. D. Bangs, Assistant Secretary of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said that they resided in the City of Baltimore, Maryland; that they, the said John T. West and E. D. Bangs were respectively the Vice-President and the Assistant Secretary of the said UNITED STATES FIDELITY AND GUARANTY COMPANY, the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their names thereto by like order as Vice-President and Assistant Secretary, respectively, of the Company. My commission expires the first day in July, A. D. 19 69.

(SEAL) (Signed) Louis Rohd
Notary Public.

STATE OF MARYLAND }
BALTIMORE CITY, } Sct.

I, Robert H. Bouse, Clerk of the Superior Court of Baltimore City, which Court is a Court of Record, and has a seal, do hereby certify that Louis Rohd, Esquire, before whom the annexed affidavits were made, and who has thereto subscribed his name, was at the time of so doing a Notary Public of the State of Maryland, in and for the City of Baltimore, duly commissioned and sworn and authorized by law to administer oaths and take acknowledgments, or proof of deeds to be recorded therein. I further certify that I am acquainted with the handwriting of the said Notary, and verily believe the signature to be his genuine signature.

In Testimony Whereof, I hereto set my hand and affix the seal of the Superior Court of Baltimore City, the same being a Court of Record, this 24th day of May, A. D. 19 68

(SEAL) (Signed) Robert H. Bouse
Clerk of the Superior Court of Baltimore City.

COPY OF RESOLUTION

That Whereas, it is necessary for the effectual transaction of business that this Company appoint agents and attorneys with power and authority to act for it and in its name in States other than Maryland, and in the Territories of the United States and in the Provinces of the Dominion of Canada and in the Colony of Newfoundland.

Therefore, be it Resolved, that this Company do, and it hereby does, authorize and empower its President or either of its Vice-Presidents in conjunction with its Secretary or one of its Assistant Secretaries, under its corporate seal, to appoint any person or persons as attorney or attorneys-in-fact, or agent or agents of said Company, in its name and as its act, to execute and deliver any and all contracts guaranteeing the fidelity of persons holding positions of public or private trust, guaranteeing the performances of contracts other than insurance policies and executing or guaranteeing bonds and undertakings, required or permitted in all actions or proceedings, or by law allowed, and

Also, in its name and as its attorney or attorneys-in-fact, or agent or agents to execute and guarantee the conditions of any and all bonds, recognizances, obligations, stipulations, undertakings or anything in the nature of either of the same, which are or may by law, municipal or otherwise, or by any Statute of the United States or of any State or Territory of the United States or of the Provinces of the Dominion of Canada or of the Colony of Newfoundland, or by the rules, regulations, orders, customs, practice or discretion of any board, body, organization, office or officer, local, municipal or otherwise, be allowed, required or permitted to be executed, made, taken, given, tendered, accepted, filed or recorded for the security or protection of, by or for any person or persons, corporation, body, office, interest, municipality or other association or organization whatsoever, in any and all capacities whatsoever, conditioned for the doing or not doing of anything or any conditions which may be provided for in any such bond, recognizance, obligation, stipulation, or undertaking, or anything in the nature of either of the same.

I, **R. H. Bland, Jr.**, an Assistant Secretary of the UNITED STATES FIDELITY AND GUARANTY COMPANY, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney given by said Company to **Cecile H. Bowers**

of **Albuquerque, New Mexico**, authorizing and empowering her to sign bonds as therein set forth, which power of attorney has never been revoked and is still in full force and effect.

And I do further certify that said Power of Attorney was given in pursuance of a resolution adopted at a regular meeting of the Board of Directors of said Company, duly called and held at the office of the Company in the City of Baltimore, on the 11th day of July, 1910, at which meeting a quorum of the Board of Directors was present, and that the foregoing is a true and correct copy of said resolution, and the whole thereof as recorded in the minutes of said meeting.

In Testimony Whereof, I have hereunto set my hand and the seal of the UNITED STATES FIDELITY AND GUARANTY COMPANY on

March 5, 1971
(Date)

R. H. Bland Jr.

Assistant Secretary.



UNITED STATES FIDELITY AND GUARANTY COMPANY
PHOENIX OFFICE
3605 N. 7TH AVENUE, PHOENIX, ARIZONA 85013
TELEPHONE: 602/277-4411

T. D. GIBSON
MANAGER

March 17, 1971

WA
Oil & Gas Conservation Commission
4415 N. 7th Avenue
Phoenix, Arizona

Re: Bond No. 01-0130-259-71
Principal: Curtis J. Little
Amount: \$5,000.00
Effective Date: 3-5-71

Gentlemen:

At the request of our Albuquerque N.M. Branch Office,
we are attaching herewith original of the above captioned
bond, properly executed and countersigned, for filing.
We trust you will find same to be in proper order.

Thank you for your assistance in this matter.

Yours Sincerely,

Glenna Crum
Bond Department

Enclosure

CC:

CANCELLED
DATE 3-26-76

8633 N. Central
Suite 106, 55070

December 23, 1975

Mr. A. P. Anderson
Division Procedures Coordinator
Allied Chemical
Union Texas Petroleum Division
P. O. Box 2120
Houston, Texas 77001

RE: Bond No. 157 99 45
Performance Bond
Our File No. 1534, 531, 529, 544 & 545

Dear Mr. Anderson:

In regard to your letter of December 16, 1975, we are this date cancelling the above captioned bond.

We are also, by copy of this letter, notifying Travelers Insurance Company of this cancellation.

If we can be of any further assistance, please advise.

Very truly yours,

Garalee Lorenzo
Secretary to W. E. Allen, Director

sl

cc: Marsh & McLennan

per file # 534

PERFORMA BOND

KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. 1579945

That we: UNION TEXAS PETROLEUM DIVISION of ALLIED CHEMICAL CORPORATION

of the County of Harris in the State of Texas

as principal, and THE TRAVELERS INDEMNITY COMPANY

of Hartford, Connecticut

AUTHORIZED TO DO BUSINESS WITHIN the State of Arizona.

as surety, are held and firmly bound unto the State of Arizona and the Oil and Gas Conservation Commission, hereinafter referred to as the "Commission", in the penal sum of Twenty Five Thousand Dollars (\$25,000.00) lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The conditions of this obligation are that, whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following described land situated within the State, to-wit:

Blanket for the state

(May be used as blanket bond or for single well)

NOW, THEREFORE, if the above bounden principal shall comply with all the provisions of the Laws of this State and the rules, regulations and orders of the Commission, especially with reference to the requirements of A.R.S. §27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil and Gas Conservation Commission all notices and records required by said Commission, then in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, this obligation is void; otherwise it shall remain in full force and effect.

Whenever the principal shall be, and declared by the Oil and Gas Conservation Commission in violation of the Laws of this State and the rules, regulations and orders of the Commission, the surety shall promptly:

1. Remedy the violation by its own efforts, or
2. Obtain a bid or bids for submission to the Commission to remedy the violation, and upon determination by the Commission and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Commission, and make available as work progresses sufficient funds to pay the cost of remedying the violation; but not exceeding, including other costs and damages for which the surety may be liable hereunder, the amount set forth in the first paragraph hereof.

Liability under this bond may not be terminated without written permission of this Commission.

WITNESS our hands and seals, this 16th day of January, 1970

ATTORNEY-IN-FACT

ALLIED CHEMICAL CORPORATION

Principal

WITNESS our hands and seals this 16th day of January, 1970

Attorney-in-Fact

THE TRAVELERS INDEMNITY COMPANY

Surety

Surety, Resident Arizona Agent
If issued in a state other than Arizona)

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved
Date

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By:

Permit No.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

Bond

File Two Copies

Form No. 2

OIL & GAS CONSERVATION COMMISSION
STATE OF ARIZONA
1624 WEST CLAYTON AVENUE 202
TULSA, OKLA. 74107
PHONE: AP 2-1145

The Travelers Indemnity Company
Hartford, Connecticut

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That THE TRAVELERS INDEMNITY COMPANY, a corporation of the State of Connecticut, does hereby make, constitute and appoint

Robert J. Whelan, Robert F. Cook, E. Schmitt, William K. Bruce, George S. Bruce, Jr., George S. Bruce, III, Robert L. Drago, A. S. Vandervort, III, all of Houston, Texas, EACH

its true and lawful Attorney(s)-in-Fact, with full power and authority, for and on behalf of the Company as surety, to execute and deliver and affix the seal of the Company thereto, if a seal is required, bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof, as follows:

Any and all bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof not exceeding in amount Five Hundred Thousand Dollars (\$500,000) in any single instance

and to bind THE TRAVELERS INDEMNITY COMPANY thereby, and all of the acts of said Attorney(s)-in-Fact, pursuant to these presents, are hereby ratified and confirmed. This appointment is made under and by authority of the following by-laws of the Company which by-laws are now in full force and effect:

Article IV, Section 14. The Chairman of the Board, the President, the Chairman of the Finance Committee, the Chairman of the Insurance Executive Committee, any Senior Vice President, any Vice President, any Second Vice President, any Secretary or any Department Secretary may appoint attorneys-in-fact or agents with power and authority, as defined or limited in their respective powers of attorney, for and on behalf of the Company to execute and deliver, and affix the seal of the Company thereto, bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof and all of said officers may remove any such attorneys-in-fact or agents from the power and authority given to them.

Article IV, Section 15. Any bond, undertaking, recognizance, consent of surety or written obligation in the nature thereof shall be valid and binding upon the Company when signed by the Chairman of the Board, the President, the Chairman of the Finance Committee, the Chairman of the Insurance Executive Committee, any Senior Vice President, any Vice President and duly attested and sealed, if a seal is required, by the Secretary or any Department Secretary or any Assistant Secretary or when signed by the Chairman of the Board, the President, the Chairman of the Finance Committee, the Chairman of the Insurance Executive Committee, any Senior Vice President, any Vice President and duly attested and sealed, if a seal is required, by the Secretary or any Department Secretary or any Assistant Secretary and counter-signed and sealed, if a seal is required, by a duly authorized officer, in fact or agent, and any such bond, undertaking, recognizance or other written obligation in the nature thereof shall be valid and binding upon the Company when executed and sealed, if a seal is required, by one or more attorneys-in-fact or agents pursuant to and within the limits of the authority granted by him or their power or powers of attorney.

This power of attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Directors of THE TRAVELERS INDEMNITY COMPANY at a meeting duly called and held on the 30th day of November, 1959:

VOTED: That the signature of any officer authorized by the By-Laws and the Company seal may be affixed by facsimile to any power of attorney or special power of attorney or certification of either given for the execution of any bond, undertaking, recognizance or other written obligation in the nature thereof, such signature and seal, when so used being hereby adopted by the Company as the original signature of such officer and the original seal to be valid and binding upon the Company with the same force and effect as though manually

CERTIFICATION

I, E. A. Houser III, Assistant Secretary (Fidelity and Surety) of THE TRAVELERS INDEMNITY COMPANY certify that the foregoing power of attorney, the above quoted Sections 14 and 15 of Article IV of the By-Laws and the Resolution of the Board of Directors of November 30, 1959 have not been abridged or revoked and are now in full force and effect.

Signed and Sealed at Hartford, Connecticut, this 16th day of January 1970



E. A. Houser III

Assistant Secretary



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

April 7, 1975

Ms. Kay Waller
Petro-Well Libraries Inc.
150 Security Life Building
1616 Glenarm Place
Denver, Colorado 80202

Re: April Current File Material

Dear Kay:

Enclosed you will find the following current material for April, 1975.

- Data - Completion Report and miscellaneous information on
Curtis Little, Union Texas Petroleum Lukachukai #1-14
File #544
- Data - Completion Report and miscellaneous information on
Geothermal Kinetics System Corp. Power Ranches No. 1
File #605
- Logs - The following are 2" scale logs: Gamma Ray Neutron,
Induction Electrolog, Acoustilog, and Caliper Log;
Subsurface Temperature Survey, Induction Electrical Log,
Comp. Formation Density and Temperature Log

Please notice the attached changed of address notice effective April 15, 1975.

Very truly yours,

Mrs. Rhema Brandt
Secretary to W. E. Allen
Director, Enforcement Section

/rlb

Encs.

To: Bill Allen

3-2-75

RECEIVED

Subachukai 1-14

MAR 10 1975

O & G CONS. COMM.

Bill -

Bill began the 1st we should
keep the Bond in effect as he
didn't know how long it would
be before the clean up was
completed and the re-seeding
done - Shanf Anne Linder

March 3, 1975

Mr. Fred Berry
951 Cragmont Avenue
Berkeley, California 94708

Re: Lukachukai #1-14
Sec 14-T37N-R29E
Apache County
Permit No. 544

Dear Mr. Berry:

We have received the information that you have submitted regarding the plugging information on the above referenced well. Also the well completion report submitted on U.S.G.S. forms. Our rules and regulations require the completion report to be on this Commission's forms. Copies of these forms are enclosed.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/r1b

Encs.

25 February, 1975
951 Cragmont Ave.
Berkeley, Ca. 94708

W. E. Allen, Director
Enforcement Section
Oil & Gas Conservation Commission
State Of Arizona
4515 North 7th Avenue
Phoenix,, Arizona 85013

Re: Plugging and Abandonment of
Curtis Little (originally Union Texas
Petroleum), Lukachukai 1-14, 1800' FSL,
1900' FWL, Sec. 14-T37N-R29E, Apache
Co., Arizona.

Dear Mr. Allen:

This well is finally plugged and abandoned. I enclose two copies of each of the following reports, four copies of which have been sent to the U.S.G.S. office in Farmington, New Mexico:

- a. USGS Form 9-330 (Well Completion Report).
- b. Attachment for above, Summary of Completion-Stimulation Attempts and Resulting Plugging.
- c. USGS Form 9-331, Abandonment Report on Well.
- d. Detailed history of plugging.
- e. Recommendations for Completion of Abandoned Petroleum Exploratory Holes as Water Wells in Cover, Arizona area. (Report prepared at the request of the U.S.G.S.)

I regret that it has taken so long to plug this well. I started trying to get this well plugged in September, 1973--it took a year and a half. The delay was principally due to the fact that there are only three rigs in Farmington capable of pulling casing and they are fantastically busy. It is an automatic two year wait for one of the rigs. Our problem was compounded by the fact that last May when we finally go a rig on location, then they were scared off by the threats of three young Navajo men. Their decision to retire was wise, but it meant months of delay before I could find another rig available and then persuade that outfit to take it out there. They were all afraid of sabotage to their rigs and equipment while left overnight. At one point, I had arranged for nightwatchmen, but then we could not obtain a rig again. I enclose a copy of Ewell Walsh's letter to me of May 13, 1974 concerning that incident.

I went to Farmington and Cover last May after this incident to try to expedite the plugging. I talked with many of the local Navajos and believe that I calmed the situation down. The incident, however, received widespread publicity in the Farmington area and we then found it very difficult to obtain another rig to go out there. My own assessment is that the actual incident was not such a big deal. However, it became blown up out of all proportion in the minds of many of the oil field people in Farmington.

Finally, this past month, I went to Farmington and Cove and personally supervised the plugging of this well. Again my apologies, but this particular delay was not due to negligence. I assume that your office has been informed of our difficulties. I asked Red Walsh on many different occasions to be sure and keep your office and the USGS posted. He told me he had done so and would continue to keep those two offices informed.

Sincerely,

Fred Berry
Fred Berry

cc: St. Mary Parish Land Company
Curtis Little
R. G. Berry Co.; Lloyd Harris
Stephen Garst

RECEIVED

O & G CONS. COMM.

PETROLEUM ENGINEERING
RESERVOIR STUDIES
EVALUATIONS
GEOLOGICAL STUDIES

EWELL N. WALSH, P.E.
President

**WALSH
ENGINEERING & PRODUCTION
CORPORATION**

EXECUTIVE BLDG. - 413 W. MAIN
P. O. BOX 254
FARMINGTON, NEW MEXICO
87401

LEASE MANAGEMENT
CONTRACT PUMPING
DRILLING SUPERVISION
WORKOVER SUPERVISION

TELEPHONE 325-8203

May 13, 1974

AIRMAIL

Mr. Fred Berry
951 Cragmont
Berkley, California 94708

Ref: Lukachukai No. 1-14
Apache County, Arizona

Dear Fred:

Tried to reach you by telephone Saturday, Sunday and Monday morning.

We went out to Cove Saturday morning with the pulling unit and a truck with equipment. The unit parked near the houses, at turn off to well, to wait while the operator in the pickup went to check the road to the location. I came upon the unit as it was parked and waited for the pickup to return.

While waiting for the pickup to return, a pickup with three Navajo young men came out on the road to the location, at too fast a speed to be driving on the road, and passed us.

A short time later the pickup, of operator also came out and he had quite a story to tell.

As he was driving into the location, the pickup with the Navajos came from where he did not know and followed them. At the turn to the location the Navajos stopped them and told them in no uncertain terms that they, the Navajos, did not want the white man on their land and that no equipment was to be brought to the location. The Navajos were evidently talking pretty rough and were emphatic with their remarks according to the unit operator in the pickup.

We went back up to the location and did not see anyone at that time.

I went and talked to Raymond Ismay about the problem. He thought the pickup belonged to John Lee. He didn't have any thoughts as to what might happen if we moved the unit on location and started to work. However, with the Indian situation at Farmington, he would not try to guess what the Navajos might do.

RECEIVED

MAY 1975

O & G CONS. COMM.

() May 13, 1974

I talked to Jim Hill, Farmington Well Service, and we decided to not take a chance on something happening to the unit when it was left, at night, with no one around. So I had the unit and truck come back to town.

When I got back I called Raymond to tell him that we were not staying out there to plug the well. He said he had talked to John Lee, however, it wasn't John Lee that was in the pickup. It may have been one of his boys with some friends.

I also talked to the New Mexico State Police and gave them the story and they said to keep them advised.

I talked to Phil McGrath and he said not to worry about any deadline on time, and if the Navajos didn't settle down, he would tell them to release the Bond and they could do what they wanted to with the well.

The problem is that the Navajos, at least a few of them, are wanting the white people (or white eyes) scalps. They have had a demonstration march for each of the last two weekends here in Farmington. In the marches they have had signs that say -- KILL THE WHITE MAN -- WHITE MAN GET OFF OF OUR LAND -- CLOSE THE BARS, ALCOHOL IS NOT GOOD FOR INDIANS.

I guess you know about the three Navajo men that were found murdered and mutilated here close to Farmington. Three teenage boys have been arrested and are being held on a charge of murder.

It seems that members of A.I.M. (American Indian Movement) and the KIVA Club (of Albuquerque) have been in here getting the Navajos all stirred up about the so-called injustice that has been done to the Indian. Some of the Indians are stirred up and some pretty harsh things have been said by the Navajos.

It is probably because of this that the young men at Cove decided to at least give the White Eyes at least a scare, and it worked. We couldn't see any reason as to why and take a chance and leave the unit out there, unattended, overnight and give someone a good chance to do some damage to the unit.

In a few days we might consider going back out to Cove; will have to wait and see how the climate might be.

Very truly yours,



Ewell N. Walsh, P. E.
President

ENW:lt

RECEIVED

MAY 13 1974

O & G CONS. COMB.

February 19, 1975

Mr. Curtis Little
1600 Broadway
Suite 1560
Denver, Colorado 80202

Re: Lukachukai #1-14
Sec 14-T37N-R29E
Apache County
Permit No. 544

Dear Curtis:

Guess what? The above referenced well has been plugged. We had no knowledge of the plugging of this well until talking with Moe Salinger a couple of days ago. He informed me that Fred Berry called him one Saturday night to let him know that he was preparing to plug the well. Berry failed to advise this office of his plans and as you know we need a completion report and the plugging report on the well. It will be appreciated if you take whatever action is necessary to secure this information for us.

This long drawn out and much written about well does not reflect on your past performance with this Commission in any manner.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

Enc.

W R

CURTIS J. LITTLE

TELEPHONE 303 • 572-7619

1800 BROADWAY, SUITE 1580
DENVER, COLORADO 80202

February 10, 1975

Mr. W. E. Allen, Director
Enforcement Section
Oil & Gas Conservation Commission
State of Arizona
4515 North 7th Avenue
Phoenix, Arizona 85013

Dear Bill:

I am in receipt of your letter to The Travelers Insurance regarding Allied Chemical's Drilling Bond #1579945.

Please accept my apologies for the delay in plugging this well. Even though I am Operator of the well, I have no interest whatsoever in the well and have attempted unsuccessfully for three years to cause the hole to be plugged.

I sincerely hope that this situation will not reflect on my established past performance with the Commission.

Yours very truly,

Curtis J. Little
Curtis J. Little

CJL/abl

cc: St. Mary Parish Land Co.
Dr. F. A. F. Berry
R. G. Berry, Jr.

RECEIVED

O & G CON. COMM.

February 7, 1975

Mrs. Clara G. Perez
The Travelers
4 Greenway Plaza East
Houston, Texas 77046

Re: Union Texas Petroleum
Div. of Allied Chemical Corp.-Principal
Blanket Drilling Bond #1579945

Dear Mrs. Perez:

The principal under the above captioned bond as of this date has not fulfilled his obligation to the State of Arizona. Until such time as the operator satisfactorily plugs and abandons the well still covered under this bond, this Commission cannot authorize cancellation of the subject bond.

We have repeatedly requested the operators to plug this well. If you could give any assistance to this Commission in this matter, it will be greatly appreciated.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/r1b

cc - Curtis Little



THE TRAVELERS

Surety Department
Bruce C. DeHart, Associate Manager

January 30, 1975

Oil & Gas Conservation Commission
4515 North 7th Ave.
Phoenix, Arizona 85013

Re: Union Texas Petroleum, Div. of
Allied Chemical Corp. - Principal
Blanket Drilling Bond #1579945

Gentlemen:

As per your letter dated 12-27-74, please advise us if the Principal under the above captioned bond has fulfilled with his obligations in order to have the bond cancelled. If so, please advise us of the status in order that we may cancel the bond. Your attention in this matter is greatly appreciated.

A return envelope is enclosed for your convenience.

Very truly yours,

THE TRAVELERS INDEMNITY COMPANY

Clara G. Perez
(Mrs.) CLARA G. Perez

cgp
Encl.
cc: March-McLennan Inc. HOu.

RECEIVED

FEB 03 1975

O & G CONS. COMM.

December 27, 1974

Mrs. Lena Simon
The Travelers
P. O. Box 1446
Houston, Texas 77001

Re: Union Texas Petroleum, Div. of
Allied Chemical Corp. - Principal
Blanket Drilling Bond
Bond #1579945

Dear Mrs. Simon:

We have received your request for cancellation of the above referenced bond. Please be advised that the principal under this bond is not in full compliance with the rules and regulations of the Oil and Gas Conservation Commission of the State of Arizona. Until such time as this company is in full compliance with all the rules and regulations, this bond cannot be released.

Should you need any further information, please let us know.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

cc Curtis Little



THE TRAVELERS

Surety Department
Robert S. Winter, Manager

December 9, 1974

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams, Suite 202
Phoenix, Arizona 85007

Re: Union Texas Petroleum, Div. of
Allied Chemical Corp. - Principal
Blanket Drilling Bond
Bond #1579945

Gentlemen:

Effective January 16, 1970 the above captioned bond was executed on behalf of The Travelers Indemnity Company as Surety. We have now been advised by the agent for our principal that the above bond be cancelled.

Please send us your acknowledgement that the bond is cancelled and the effective date in which we may terminate our liability.

A return envelope is enclosed for your convenience.

Yours very truly,

THE TRAVELERS INDEMNITY COMPANY

(Mrs.) Lena Simon

/s

Encl.

cc: Marsh-McLennan Inc. of Houston

RECEIVED

DEC 27 1974

O & G CONS. COMM.

9-7-74

Bill,

I have sent copies of this letter to Fred Berry, Garvin Berry & Bill Sago of St. Mary Parish Land Co. who are the working interest owners of this hole.

I have asked repeatedly that they get this hole plugged & abandoned since Quint is the designated operator and we feel responsible. Fred Berry calls the shots and he changed from Larry Bedford to Red Walsh and I heard Red went out in the spring and the Navajos ran him around. Phil McDrath told him to wait 'til things cooled down on the reservation.

I received a copy of a letter from Fred to Red dated 9-27 wherein Fred asked that this work be completed. If and when I have additional information, I will notify you.

I would appreciate any recommendations you might have.

Anne —

RECEIVED

OCT 9 1974

O & G CONS. COMM.



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

September 27, 1974

Mr. Curtis Little
1600 Broadway
Suite 1560
Denver, Colorado 80202

Re: Lukachukai #1-14
Sec 14-T37N-R29E
Apache County
Permit No. 544

Dear Mr. Little:

Please refer to our letter of March 4, 1974 requesting the plugging of the above referenced well. Also refer to your letter of March 20, 1974, wherein you stated that you anticipated this well to be plugged some time in April. In response to this letter, this Commission authorized you to maintain the well in a temporary abandoned status until June 1, 1974. This date has long since passed. Please inform us when this well will be plugged and abandoned.

Also complete and return for our approval the attached Form 9, Application to Abandon and Plug.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/r1b

Enc.

(over)

UNIVERSAL RESOURCES CORPORATION

420 COLORADO STATE BANK BUILDING



DENVER, COLORADO 80202
AREA 303/572-1511

Effective immediately, Universal Resources Corporation
has changed its Denver office mailing address to:

UNIVERSAL RESOURCES CORPORATION

P. O. Box 1707

Denver, Colorado 80201

RECEIVED

OCT 21 1974

O & G CONS. COMM.

Home Office - 1000 Carillon Tower East, Dallas, Texas 75240

R. J. Felt

September 27, 1974

Mr. Curtis Little
1600 Broadway
Suite 1560
Denver, Colorado 80202

Re: Lukachukai #1-14
Sec 14-T37N-R29E
Apache County
Permit No. 544

Dear Mr. Little:

Please refer to our letter of March 4, 1974 requesting the plugging of the above referenced well. Also refer to your letter of March 20, 1974, wherein you stated that you anticipated this well to be plugged some time in April. In response to this letter, this Commission authorized you to maintain the well in a temporary abandoned status until June 1, 1974. This date has long since passed. Please inform us when this well will be plugged and abandoned.

Also complete and return for our approval the attached Form 9, Application to Abandon and Plug.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

Enc.

March 25, 1974

Mrs. Anne Little
1600 Broadway
Suite 1560
Denver, Colorado 80202

Re: Lukachukai #1-14
Sec 14-T37N-R29E
Apache County
Permit No. 544

Dear Anne:

The Commission grants permission for the above referenced well to remain in temporary abandoned status until June 1, 1974. This ninety day period should give Larry ample time to arrange to plug the well.

Please advise us when the plugging operations will commence.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

WA

CURTIS J. LITTLE

TELEPHONE 303 • 572-7619
1600 BROADWAY, SUITE 1560
DENVER, COLORADO 80202

March 20, 1974

Mr. W. E. Allen
Oil and Gas Conservation Commission
State of Arizona
4515 North 7th Ave.
Phoenix, Arizona 85013

Re: Your File #544
Lukachukai #1-14
Sec. 14, T 37N, R 29E
Apache County, Arizona

Dear Mr. Allen:

The working interest owners of subject test have made arrangements with Larry Bedford to pull casing, plug and clean-up location.

It is anticipated that this work will be performed in April and we, therefore, request permission to extend temporary abandoned status until such work can be completed.

The appropriate forms will be filed prior to work.

Yours very truly,

Curtis J. Little
Curtis J. Little

abl

cc: Mr. John Welch
Union Texas Petroleum
Suite 788, Lincoln Tower
1860 Lincoln St.
Denver, CO 80203

RECEIVED

MAR 22 1974

O & G CONS. COMM.

March 4, 1974

Mr. Curtis J. Little
1600 Broadway, Suite 1560
Denver, Colorado 80202

Re: Lukachukai #1-14
Sec 14-T37N-R29E
Apache County
File No. 544

Dear Mr. Little:

You are aware that this Commission has on several occasions granted permission to leave the above referenced well in a temporary abandoned status. The last such request expired March 1, 1974. It is the opinion of this Commission that the subject well should now be plugged and abandoned unless you are able to demonstrate to the Commission that this well will in the very near future be of beneficial use.

This letter is to be considered a formal request to plug and abandon the subject well, therefore bringing you into compliance with Paragraph B, Rule 202 of the Oil and Gas Conservation Commission's Rules and Regulations. Application to Plug and Abandon, Form 9, and Plugging Report, Form 10, are enclosed.

Your early cooperation in this matter will be appreciated.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/r1b

Encs.

September 4, 1973

Mrs. Anne Little
1600 Broadway Suite 1560
Denver, Colorado 80202

Re: Lukachukai #1-14
Sec 14-T37N-R29E
Apache County
File No. 544

Dear Anne;

Permission is granted to leave the above referenced well temporarily
abandoned until March 1, 1974.

Very truly yours,

W.E.A.
W. E. Allen, Director
Enforcement Section

Rhema L. Brandt
Secretary to W. E. Allen

/rlb

My little scheme to
get a short extension
to try to get some-
thing done didn't
work!

CURTIS J. LITTLE

TELEPHONE 303 • 572-7619

1800 BROADWAY, SUITE 1560
DENVER, COLORADO 80202

August 28, 1973

Mr. W. E. Allen
Arizona Oil & Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Re: Lukachukai 1-14
Sec. 14-T37N-R29E
Apache County, Arizona
Yours File #544

Dear Bill:

It has become necessary to request an extension for the temporary abandonment status of this well again. Garvin Berry has suggested 120 days.

Best regards,



Anne B. Little

RECEIVED

AUG 30 1973

O & G CONS. COMM.

June 28, 1973

Curtis J. Little
1600 Broadway Suite 1560
Denver, Colorado 80202

Re: Lukachukai 1-14
Sec 14-37N-R29E
Apache County
File No. 544

Dear Anne:

It is O.K. to leave the above referenced well temporarily abandoned until September 1, 1973. You notice we gave you an extra month just in case.

I would appreciate it if you would notify me several days in advance of plugging this well.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/r1b

CURTIS J. LITTLE

TELEPHONE 303 - 572-7619
1600 BROADWAY, SUITE 1560
DENVER, COLORADO 80202

June 25, 1973

Mr. W. E. Allen
Arizona Oil & Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Re: Lukachukai 1-14
Sec. 14-T37N-R29E
Apache County, Arizona
Your File #544

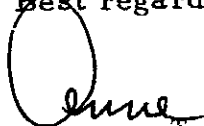
Dear Bill:

Fred Berry has been under the weather and has been unable to make arrangements on this well.

He is now recovering from surgery and is trying to get in touch with Tommy Dugan to make a final decision on this well.

We request an extension on the temporary abandonment status of this well until August 1, 1973.

Best regards,


Anne B. Little

RECEIVED

JUN 26 1973

O & G CONS. COMM.

February 15, 1973

Mrs. Curtis Little
1600 Broadway
Suite 1560
Denver, Colorado 80202

Re: Lukachukai 1-14
Section 14-T37N-R29E
Apache County
Our File #544

Dear Anne:

We have previously approved a copy of Form No. 17. This form was submitted by Bill Spear on August 31, 1972. The approved copy was sent to the Permian Corporation in Houston, Texas. We are enclosing a copy of this form together with a note we received from Permian.

If Permian requires other approved copies, please advise and we will approve these forms that you have sent and return them to you.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

Encs.

WA
1600 BROADWAY, SUITE 1560
DENVER, COLORADO 80202

TELEPHONE 303-572-7619

February 13, 1973

Mr. W. E. Allen
Arizona Oil and Gas Conservation Commission
4515 North 7th Ave.
Phoenix, Arizona 85013

Re: Your file #544

Dear Bill:

The enclosed report covers oil recovered from the Lukachukai 1-14.

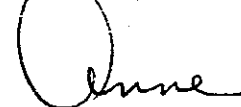
You may recall that this test was drilled by Union Texas Petroleum and it has been difficult to get information on this oil.

We would very much like to be able to be paid for this oil so the money can be distributed to partners involved.

If we can get approval of this Form #17, we would be most appreciative so that Permian can pay us.

Thanks.

Best regards,



Anne B. Little

abl
encls

RECEIVED
FEB 15 1973
O & G CONS. COMM.

WA

CURTIS J. LITTLE

TELEPHONE 303 • 572-7619

1600 BROADWAY, SUITE 1560
DENVER, COLORADO 80202

December 19, 1972

Mr. W. E. Allen
Arizona Oil & Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Dear Bill:

We have been trying to get Permian Corporation to pay us for some oil picked up at the Navajo 1-14 in Apache County. The oil was frac oil and Permian says it is necessary for us to file State Conservation Form P-17.

Please send us this form. Thanks.

We both hope all of you at the AOGCC have a good holiday season and that 1973 will be Arizona's oil year.

Best regards,

Anne

RECEIVED

DEC 22 1972

O & G CONS. COMM.

December 4, 1972

Mrs. Curtis Little
1600 Broadway
Suite 1560
Denver, Colorado 80202

Re: Lukachukai 1-14
Section 14-T37N-R29E
Apache County
Our File #544

Dear Mrs. Little:

This letter represents your authority to retain the above referenced well in a temporary abandonment status until July 1, 1973.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/r1b

December 4, 1972

Mrs. Curtis Little
1600 Broadway
Suite 1560
Denver, Colorado 80202

Dear Anne:

We were glad to learn that you people havn't given up on the area in northeastern Apache County. I sincerely hope that the next well that you drill in Arizona will be the pot of gold at the end of the rainbow.

The Commission staff joins me in wishing you and Curtis a very Merry Christmas and a Happy New Year with gobs of flowing wells.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

1600 BROADWAY, SUITE 1560
DENVER, COLORADO 80202

TELEPHONE 303-572-7619

November 29, 1972

Mr. W. E. Allen
Arizona Oil & Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Re: Lukachukai 1-14
Section 14-T 37N- R 29E
Apache County, Arizona
Your file \$544

Dear Bill:

Work has begun on getting another test drilled close to the subject hole prior to rental dates; therefore, we request an extension on the temporary abandonment status of subject well to July 1, 1973.

Best regards,


Anne B. Little

abl

cc: R. G. Berry, Jr.

RECEIVED
DEC 01 1972
O & G CONS. COMM.

Mr. Allen

Attached please find copies of Form 17 for recovered lead
oil from Curtis Little Navajo 1-14. Please mail copy of
Approved Form to:

Perma

Permian Corporation
P.O. Box 1183
Houston, Texas 77001
ATTN: PRODUCTION

Thank you

Permian Corporation
Box 1702
Farmington, N.M.

W.R. Lusk

RECEIVED

SEP 06 1972

O & G CONS. COMM.

June 8, 1972

Mrs. Curtis J. Little
Consulting Geologist
1560 Colorado State Bank Building
Denver, Colorado 80202

Re: Lukachukai 1-14
Section 14-T37N-R29E
Apache County
Our File #544

Dear Anne:

We are sorry about the error in dates. We, of course, meant January 1, 1973 as the extension date for temporary abandonment status of the above referenced well.

We are enclosing the forms you requested.

I am sure you are aware that Humble has staked a 1200' test in Section 2-T8S-R8E, Pinal County. At the last report they were moving in the rotary.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/r1b

Encs.

CURTIS J. LITTLE
CONSULTING GEOLOGIST

~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~

1560 Colorado State Bank Bldg.
Denver, Colorado 80202

June 6, 1972

Mr. W. E. Allen
Arizona Oil & Gas Conservation Commission
4515 North 7th Ave.
Phoenix, Arizona 85013

Re: Lukachukai 1-14
Section 14 - 37N - 29E
Apache County, Arizona
Your File #544

Dear Bill:

I have been going through some Arizona files and note a typographical error in your letter of 4-21-72 granting an extension on the Lukachukai 1-14 to January 1, 1972 rather than January 1, 1973. Please confirm the 1973 date.

Also, please forward a small supply of Commission forms needed for drilling in Arizona such as Bond, Application to Drill, etc.

Thanks.

Best regards,


Anne B. Little

abl

RECEIVED

JUN 08 1972

O & G CONS. COMM.



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

April 21, 1972

Mr. Curtis J. Little
Consulting Geologist
1560 Colorado State Bank Building
Denver, Colorado 80237

Re: Lukachukai 1-14
Section 14-T37N-R29E
Apache County
Our File #544

Dear Curtis:

In response to your request for an additional six months extension of the temporary abandon status of the above referenced hole, this letter is your authorization to maintain this status for your hole to January 1, 1973.

Very truly yours,

A handwritten signature in cursive script, appearing to read "W. E. Allen".

W. E. Allen, Director
Enforcement Section

WEA/r1b

RECEIVED

JUN 08 1972

O & G CONS. COMM.

April 21, 1972

Mr. Curtis J. Little
Consulting Geologist
1560 Colorado State Bank Building
Denver, Colorado 80237

Re: Lukachukai 1-14
Section 14-T37N-R29E
Apache County
Our File #544

Dear Curtis:

In response to your request for an additional six months extension of the temporary abandon status of the above referenced hole, this letter is your authorization to maintain this status for your hole to January 1, 1973.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/r1b

WA

57

CURTIS J. LITTLE
CONSULTING GEOLOGIST

XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

1560 Colorado State Bank Bldg.
Denver, Colorado 80237

April 18, 1972

Mr. W. E. Allen
Arizona Oil & Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Re: Lukachukai 1-14
Section 14- T 37N, R 29E
Apache County, Arizona
Permit #544 J 75 3.

Dear Bill:

The lack of success in the area of subject test has not dimmed hopes of drilling atleast one more test and we are requesting a six months extension of the temporary abandon status on this hole.

We appreciate your consideration of this request.

Yours very truly,

Curtis J. Little

By Anne

abl

cc: Garvin Berry
F. A. F. Berry

Expires
1-1-73

RECEIVED

APR 21 1972

O & G CONS. COMM.

April 6, 1972

Mr. Curtis J. Little
Universal Resources Corporation
1720 Colorado State Bank Building
Denver, Colorado 80202

Re: Union Texas Lukachukai #1-14
NE/SW Section 14-T37N-R29E
Apache County
Our File #544

Curtis J. Little, Navajo 1-16
NE/NE Section 16-T37N-R29E
Apache County
Our File #575

Dear Curtis:

In checking through our files, we notice that we have failed to receive the logs that you ran on your Navajo 1-16. Would you please forward copies of these logs to this office as soon as possible.

As a reminder, the extension for the temporary abandon status of your Lukachukai 1-14 well, expires May 1, 1972. We would appreciate being advised of your plans for this well.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

UNIVERSAL RESOURCES CORPORATION

11411 NORTH CENTRAL EXPRESSWAY



DALLAS, TEXAS 75231
AREA 214/691-0040

Suite 1720
Colorado State Bank Bldg.
Denver, Colorado 80202


January 31, 1972

Mr. W. E. Allen
Director, Enforcement Section
Oil and Gas Conservation Commission
State of Arizona
4515 North 7th Avenue
Phoenix, Arizona 85013

Dear Mr. Allen:

You have my permission to release information you have
on file to interested operators.

Yours truly,


Curtis J. Little

CJL:jr

RECEIVED

FEB 02 1972

O & G CONS. COMM.

January 28, 1972

Mr. Curtis J. Little
Universal Resources Corporation
1720 Colorado State Bank Building
Denver, Colorado 80202

Re: Union Texas Petroleum (~~Intersect PI 14~~)
Section 14-T6N-R10W
Apache County
Our File #544
534

Dear Mr. Little:

We have had request for information and copies of the above referenced well. May we have your permission to divulge what information we have on file and also furnish copies of logs to interested operators?

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb



OFFICE OF

Oil and Gas Conservation Commission

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

January 28, 1972

Mr. C. W. Spencer
P. O. Box 6216
Cherry Creek Station
Denver, Colorado 80206

Re: Curtis J. Little #1-22 Tsegehot-Tsane
Section 22-T37N-R29E
Apache County
Our File #563

Union Texas Petro. #1-14
Section 14-T37N-R10W (Navajo)
Apache County
Our File #534

Dear Mr. Spencer:

We have the following logs available on the Curtis Little #1-22 Tsegehot-Tsane:

1. Dual Induction-Laterolog
2. Proximity Log-Microlog
3. Sidewall Neutron Porosity Log

The Union Texas #1-14 is still on confidential status. The logs that are available on this well are:

1. Induction-Electrical Log
2. Amplitude Log
3. Dual Induction-Laterolog
4. Borehole Compensated Sonic Log-Gamma Ray
5. Sidewall Neutron Porosity Log

Our files also contain a Lithologic Log on this well. The depths on these two wells are 3765' and 3705' respectively.

We feel sure that if you would contact Mr. Curtis Little at his address of----Mr. Curtis J. Little, Universal Resources Corp. 1720 Colorado State Bank Building, Denver, Colorado - 80202; that he would be willing for us to release the logs on the #1-14, however, we would need a written permission from Mr. Little.

Page 2
Mr. C. W. Spencer
January 28, 1972

This office does not have facilities for reproducing logs, however, we can have them reproduced at a cost of 40¢ per square foot for bond paper and 50¢ per square foot for vellum.

If you desire copies of the logs that are available, please advise and we will arrange to have them reproduced and forwarded to you.

Very truly yours,



W. E. Allen, Director
Enforcement Section

WEA/rlb



PETROLEUM PRODUCTS

P. O. Box 6216, Cherry Creek Station
Denver, Colorado 80206
January 26, 1972

Arizona Oil & Gas Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Gentlemen:

We would like to obtain copies of the logs on the following wells if they have been released from "confidential" status. However, if the cost will run over \$25, we would like to be advised before the copies are made.

Curtis Little #1-22 Tsegehot-Tsane, Sec. 22, T37N-R29E, Apache County, 563

Union Texas Petroleum #1-14 Navajo, Sec. 14, T6N-R10W, Apache County, ~~544~~ 534

Very truly yours,

C. W. Spencer

C. W. Spencer
District Geologist

DUH-RM

RECEIVED

JAN 28 1972

O & G CONS. COMM.

*Beard - 404
1/21/72 50¢
20
make copy*



OFFICE OF
Oil and Gas Conservation Commission

STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

December 14, 1971

Mr. Curtis J. Little
P. O. Box 8976
Albuquerque, New Mexico 87108

Re: Progress Reports

Dear Curtis:

Due to the numerous inquiries this office is presently receiving pertaining to drilling and producing operations within the State, it has been deemed advisable that we receive a progress report on all drilling, completion, and work-over operations with the State.

A Directive was recently mailed to all operators concerning this progress report, apparently, you did not receive one. Will you please keep this office informed as to your present operations. Of course, this information will be kept strictly confidential, if you so desire.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

Enc.



OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
4515 NORTH 7TH AVE.
PHOENIX, ARIZONA 85013
PHONE: (602) 271-5161

November 15, 1971

Mrs. Curtis J. Little
P. O. Box 8976
Albuquerque, New Mexico 87108

Re: 1-22 Tsegehot-tsane
Section 22, T-37N-R29E
Apache County
Permit #563

Lukachukai 1-14
Section 14, T37N-R29E
Apache County
Permit #544

Dear Mrs. Curtis:

The requested extension on your Lukachukai #1-14 is granted. This extension may run to May 1, 1972. We thought the 90 days might be a little short.

In reference to your #1-22 Tsegehot-tsane, as quickly as this well location is cleaned up and a dry hole marker installed, we will be in a position to release the Bond on this well.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA/rlb

CURTIS J. LITTLE
CONSULTING GEOLOGIST
TELEPHONE (505) 268-8741
POST OFFICE BOX 8976
4300 SILVER AVENUE, S. E.
ALBUQUERQUE, NEW MEXICO 87108

November 11, 1971

Mr. W. E. Allen
Arizona Oil and Gas Conservation Commission
4515 North 7th Avenue
Phoenix, Arizona 85013

Re: Lukachukai 1-14
Section 14, T 37 N, R 29 E
Apache County, Arizona
Permit 544

Dear Mr. Allen:

Somewhere in the Lukachukai Mts. in his personal file, Curtis has a letter from you re plugging subject test by some date in December, 1971.

We are very optimistic concerning another test in the area and feel there is a possibility this well could be useful if not plugged.

Therefore, we request a 90-day extension for plugging this hole to allow time for drilling another test and evaluation.

Thanks.

Best regards,
Curtis J. Little

By *Anne B. Little*

abl

cc: R. G. Berry, Jr.

RECEIVED

NOV 15 1971

O & G CONS. COMM.

12-1-71

August 11, 1971

Mr. Curtis J. Little
Lukachukai
P.O. Box 8976
Albuquerque, New Mexico 87108

Re: Union Texas #1-14 Navajo
NE SW Section 14-T-37N R29E

~~#354~~ 544

Dear Curtis:

We were indeed sorry to learn that the fracking of the above referenced well didn't produce the results that I am sure you were seeking.

You may leave this well on a temporary abandoned status until such time your new well, mentioned in your Sundry Notices and Reports, is drilled and completed. However, this well must be plugged or used as an injection well prior to December 1, 1971.

Good luck to you and your group in the drilling of this other well.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA/r1b

WP

CURTIS J. LITTLE
CONSULTING GEOLOGIST
TELEPHONE (505) 268-8741
POST OFFICE BOX 8976
4300 SILVER AVENUE, S. E.
ALBUQUERQUE, NEW MEXICO 87108

April 5, 1971

Oil and Gas Conservation Commission
State of Arizona
4515 North 7th Avenue
Phoenix, Arizona 85013

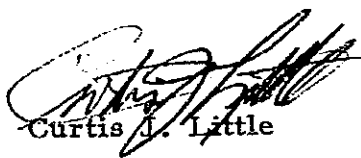
Attn: Mr. W. E. Allen

Re: Lukachukai No. 1-14
NE SW Section 14, T-37N, R-29E
Apache County, Arizona
Your File: 544

Dear Sir:

Enclosed is Form 25 relative to subject well.

Yours very truly,


Curtis J. Little

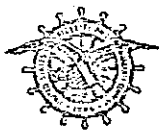
abl
encl

cc: R. G. Berry Co.

RECEIVED

APR 07 1971

O & G CONS. COMM.



UNITED STATES FIDELITY AND GUARANTY COMPANY
PHOENIX OFFICE
3605 N. 7TH AVENUE, PHOENIX, ARIZONA 85013
TELEPHONE: 602/277-4411

T. D. GIBSON
MANAGER

March 17, 1971

WA
Oil & Gas Conservation Commission
4415 N. 7th Avenue
Phoenix, Arizona

Re: Bond No. 01-0130-259-71
Principal: Curtis J. Little
Amount: \$5,000.00
Effective Date: 3-5-71

Gentlemen:

At the request of our Albuquerque N.M. Branch Office,
we are attaching herewith original of the above captioned
bond, properly executed and countersigned, for filing.
We trust you will find same to be in proper order.

Thank you for your assistance in this matter.

Yours Sincerely,

Glenna Crum

Glenna Crum
Bond Department

Enclosure

CC:

CURTIS J. LITTLE
CONSULTING GEOLOGIST
TELEPHONE (505) 268-8741
POST OFFICE BOX 8976
4300 SILVER AVENUE, S. E.
ALBUQUERQUE, NEW MEXICO 87108

March 1, 1971

Oil and Gas Conservation Commission
State of Arizona
4515 North 7th Avenue
Phoenix, Arizona 85013

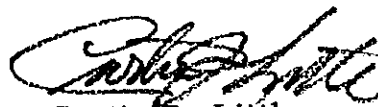
Attn: Mr. W. E. Allen

Re: Lukachukai No. 1-14
NE SW Section 14, T-37N, R-29E
Apache County, Arizona
Your File: 544

Dear Sir:

Enclosed is Form 25 relative to subject well. In the past, this form has been filed by Union Texas Petroleum who is the former operator.

Yours very truly,


Curtis J. Little

abl
encl

cc: R. G. Berry Co.
W. T. Blackburn
Buttes Gas & Oil Co.
St. Mary Parish Land Co.
Alf R. Thompson, et al

RECEIVED
MAR 03 1971
O & G CONS. COMM.



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

March 1, 1971

Oil and Gas Conservation Commission
State of Arizona
4515 North 7th Avenue
Phoenix, Arizona 85013

Attention: Mr. W. E. Allen
Director, Enforcement Section

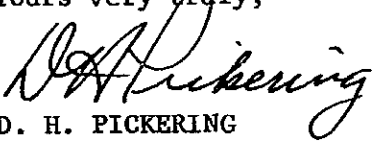
Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
Apache County, Arizona
Your File: #544

Gentlemen:

Enclosed are two copies of Form 25 relative to the subject well.

As reported on February 1, 1971, we expect another operator for this well to be designated in the very near future.

Yours very truly,


D. H. PICKERING
Petroleum Engineer

Copies:

R. G. Berry Co., 227 Mayo Building, Tulsa, Oklahoma 74103
W. T. Blackburn, 1650 Denver Club Bldg., Denver, Colorado 80202
Buttes Gas & Oil Co., 1200 Denver Center Bldg., 1776 Lincoln St.,
Denver, Colorado 80203
St. Mary Parish Land Co., 1010 Denver Center Bldg., 1776 Lincoln
St., Denver, Colorado 80203
Alf R. Thompson, et al, P. O. Box 69, Mattoon, Illinois 61938
Mr. Bill Holmes, Houston Office
Encl.

rw

RECEIVED

MAR 03 1971

O & G CONS. COMM.

CURTIS J. LITTLE
CONSULTING GEOLOGIST
TELEPHONE (505) 268-8741
POST OFFICE BOX 8976
4300 SILVER AVENUE, S. E.
ALBUQUERQUE, NEW MEXICO 87108

February 18, 1971

Mr. P. T. McGrath
U. S. Geological Survey
P.O. Box 959
Farmington, New Mexico 87401

Re: Navajo 1-14
Section 14, T-37N, R-29E
Apache County, Arizona

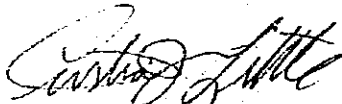
Dear Phil:

Enclosed are ³ ~~two~~ copies of Designation of Operator from W. T. Blackburn to me covering the SW/4 of Section 14, Township 37 North, Range 29 East, Apache County, Arizona.

If this State Form is not acceptable, please advise and I will send Blackburn Federal Form 9-1123.

In review, pipe was set, perforated and acidized on the Navajo 1-14. Water and oil was swabbed in non-commercial quantities. Operations are suspended pending the drilling of another test in the area and/or fracing the 1-14 or using it as a salt water disposal well. A decision will be made within 90-120 days.

Yours very truly,


Curtis J. Little

CJL/abl

cc: John Bannister
P. K. Hurlbut

RECEIVED

FEB 22 1971

U. S. GEOLOGICAL SURVEY



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

WA

February 1, 1971

Oil and Gas Conservation Commission
State of Arizona
4515 North 7th Avenue
Phoenix, Arizona 85013

Attention: Mr. W. E. Allen
Director, Enforcement Section

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
Apache County, Arizona
Your File: #544

Gentlemen:

This is written to confirm our agreement that the subject well may
now be released from its confidential status.

Yours very truly,

W. L. HIXON
District Production Manager

Copies:

R. G. Berry Co., 227 Mayo Building, Tulsa, Oklahoma 74103
W. T. Blackburn, 1650 Denver Club Bldg., Denver, Colorado 80202
Buttes Gas & Oil Co., 1200 Denver Center Bldg., 1776 Lincoln St.,
Denver, Colorado 80203
St. Mary Parish Land Co., 1010 Denver Center Bldg., 1776 Lincoln
St., Denver, Colorado 80203
Alf R. Thompson, et al, P. O. Box 69, Mattoon, Illinois 61938
Mr. Bill Holmes, Houston Office

WLH:rw

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FEB 03 1971

O & G CONS. COMM.



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

February 1, 1971

Oil and Gas Conservation Commission
State of Arizona
4515 North 7th Avenue
Phoenix, Arizona 85013

Attention: Mr. W. E. Allen
Director, Enforcement Section

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
Apache County, Arizona
Your File: #544

Gentlemen:

Enclosed are original and duplicate copies of Form 25 relative to the Union Texas Lukachukai #1-14 well. As discussed on the telephone this date, we expect another operator for this well will be designated very shortly.

Yours very truly,

W. L. HIXON

District Production Manager

Copies:

R. G. Berry Co., 227 Mayo Building, Tulsa, Oklahoma 74103
W. T. Blackburn, 1650 Denver Club Bldg., Denver, Colorado 80202
Buttes Gas & Oil Co., 1200 Denver Center Bldg., 1776 Lincoln St.,
Denver, Colorado 80203
St. Mary Parish Land Co., 1010 Denver Center Bldg., 1776 Lincoln
St., Denver, Colorado 80203
Alf R. Thompson, et al, P. O. Box 69, Mattoon, Illinois 61938
Mr. Bill Holmes, Houston Office
Encl.
WLH:rw

RECEIVED

FEB 03 1971

O & G CONS. COMM.

January 11, 1971

Mr. R. G. Berry, Jr.
R. G. Berry Oil Company
227 Mayo Building
Tulsa, Oklahoma 74103

Re: Union Texas Lukachukai #1-14
NE/4 SW/4 Sec. 14-T37N-R29E
Apache County
Our File #544

Dear Mr. Berry:

It is my understanding that your company is planning to assume the responsibility for the operation of the above referenced well.

Before the State of Arizona can release Union Texas Petroleum Company from their responsibility, the following forms must be completed and approved by the Commission:

1. Organization Report (Your Company)
2. Designation of Operator
3. Bond; \$5,000 for single well or \$25,000 for all operations within the State of Arizona.

At such time as you decide to re-enter the subject well, it will be necessary that you have Form 3, Application for Permit to Drill, Re-open, Plug Back, or Re-Enter; completed and sent to this office for approval.

Until such time as a re-completion attempt is made on this well, we will expect to receive Form 25, Sundry Notices and Reports on Wells, each month detailing the current status of this well. So long as this information is forthcoming, the well may remain on a temporarily abandoned basis for a reasonable length of time.

Page 2
January 11, 1971
Mr. R. G. Berry, Jr.

Enclosed is a supply of all pertinent forms together with a copy of the Rules and Regulations and a booklet published by the Arizona Bureau of Mines with the cooperation of the Oil and Gas Commission.

Let me assure you, Mr. Berry, that this Commission has a sincere desire to cooperate with all operators in any possible manner. If we can be of any assistance whatsoever, please advise.

Very truly yours,

W. E. Allen, Director
Enforcement Section

WEA:jd
Enc.



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

WA

December 28, 1970

Oil and Gas Conservation Commission
State of Arizona
Room 202, 1624 West Adams
Phoenix, Arizona 85007

Attention: Mr. W. E. Allen
Director, Enforcement Section

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
Apache County, Arizona
Your File: #544

Gentlemen:

Enclosed are original and duplicate copies of Form 25 relative to the Union Texas Lukachukai #1-14 well.

We will continue to furnish copies of this form per your original request.

Yours very truly,

W. L. Hixon
District Production Manager

WLH:dm
Enclosures

Copies:

R. G. Berry Co., 227 Mayo Building, Tulsa, Oklahoma 74103
W. T. Blackburn, 1650 Denver Club Bldg., Denver, Colorado 80202
Buttes Gas & Oil Co., 1200 Denver Center Bldg., 1776 Lincoln St.,
Denver, Colorado 80203
St. Mary Parish Land Co., 1010 Denver Center Bldg., 1776 Lincoln St.,
Denver, Colorado 80203
Alf R. Thompson, et al, P. O. Box 69, Mattoon, Illinois 61938
Mr. Bill Holmes, Houston Office

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DEC 31 1970

O & G CONS. COMM.



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

WPA

November 25, 1970

Oil and Gas Conservation Commission
State of Arizona
Room 202, 1624 West Adams
Phoenix, Arizona 85007

Attention: Mr. W. E. Allen
Director, Enforcement Section

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
Apache County, Arizona
Your File: #544

Gentlemen:

Enclosed are original and duplicate copies of Form 25 relative to the Union Texas Lukachukai #1-14 well.

We will continue to furnish copies of this form per your original request.

Yours very truly,

W. L. HIXON
District Production Manager

Copies:

R. G. Berry Co., 227 Mayo Building, Tulsa, Oklahoma 74103
W. T. Blackburn, 1650 Denver Club Bldg., Denver, Colorado 80202
Buttes Gas & Oil Co., 1200 Denver Center Bldg., 1776 Lincoln St., Denver, Colorado 80203
St. Mary Parish Land Co., 1010 Denver Center Bldg., 1776 Lincoln St., Denver, Colorado 80203
Alf R. Thompson, et al, P. O. Box 69, Mattoon, Illinois 61938
Mr. Bill Holmes, Houston Office
Encl.
WLH:rw

RECEIVED
NOV 30 1970
O & G CONS. COMM.



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

October 27, 1970

Oil and Gas Conservation Commission
State of Arizona
Room 202, 1624 West Adams
Phoenix, Arizona 85007

Attention: Mr. W. E. Allen
Director, Enforcement Section

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
Apache County, Arizona
Your File: #544

Gentlemen:

Enclosed are original and duplicate copies of Form 25 relative to the
Union Texas Lukachukai #1-14 well.

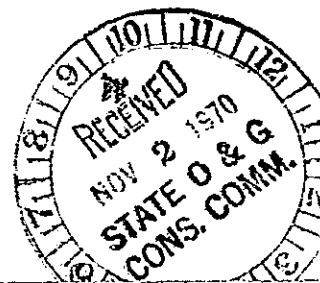
We will continue to furnish copies of this form every thirty days until
the well is abandoned or reworked.

Yours very truly,

W. L. HIXON
District Production Manager

Copies:

R. G. Berry Co., 227 Mayo Building, Tulsa, Oklahoma 74103
W. T. Blackburn, 1650 Denver Club Bldg., Denver, Colorado 80202
Buttes Gas & Oil Co., 1200 Denver Center Bldg., 1776 Lincoln St., Denver,
Colorado 80203
St. Mary Parish Land Co., 1010 Denver Center Bldg., 1776 Lincoln St., Denver,
Colorado 80203
Alf R. Thompson, et al, P. O. Box 69, Mattoon, Illinois 61938
Mr. Bill Holmes, Houston Office
Encl.
WLH:rw



544



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

September 28, 1970

Oil and Gas Conservation Commission
State of Arizona
Room 202, 1624 West Adams
Phoenix, Arizona 85007

Attention: Mr. W. E. Allen
Director, Enforcement Section

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
Apache County, Arizona
Your File: #544

Gentlemen:

Enclosed are original and duplicate copies of Form 25 relative to the
Union Texas Lukachukai #1-14 well.

We will continue to furnish copies of this form every thirty days until
the well is abandoned or reworked.

Yours very truly,

W. L. HIXON
District Production Manager

Encl.
WLH:rw

Copies:

R. G. Berry Co., 227 Mayo Building, Tulsa, Oklahoma 74103
W. T. Blackburn, 1650 Denver Club Bldg., Denver, Colorado 80202
Buttes Gas & Oil Co., 1200 Denver Center Bldg., 1776 Lincoln St., Denver,
Colorado 80203
St. Mary Parish Land Co., 1010 Denver Center Bldg., 1776 Lincoln St., Denver,
Colorado 80203
Alf R. Thompson, et al, P. O. Box 69, Mattoon, Illinois 61938
Mr. Bill Holmes, Houston Office

September 18, 1970

Mr. W. L. Hixon
District Production Manager
Union Texas Petroleum Division
Suite 1010 Lincoln Tower
1860 Lincoln Street
Denver, Colorado 80203

Re: Union Texas Lukachukai #1-14 Navajo
NE/4 SW/4 Sec. 14-T37N-R29E
Apache County
Our File #544

Dear Mr. Hixon:

Enclosed are the attached forms #25 that were discussed in our telephone conversation of September 17. Please have one of these forms completed with the available testing information. And each thirty days thereafter so long as the well is temporarily shut in, have one of these forms completed outlining the current status of the well and sent to this office.

As you know, according to Rule 202, Section B, of the Oil and Gas Conservation Commission, "When drilling operations have been suspended for 60 days, the well shall be plugged and abandoned unless written permission for temporary abandonment shall be obtained from the Commission". So long as the forms #25 are submitted, this letter will constitute permission to temporarily suspend operations on this well.

Very truly yours,

W. E. Allen
Director, Enforcement Section

WEA:jd
Enc.



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

July 28, 1970

Arizona Oil and Gas Conservation Commission
Room 202, 1624 West Adams
Phoenix, Arizona 85007

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
North Lukachukai Area
Apache County, Arizona
NOO-C-14-20-2202

Gentlemen:

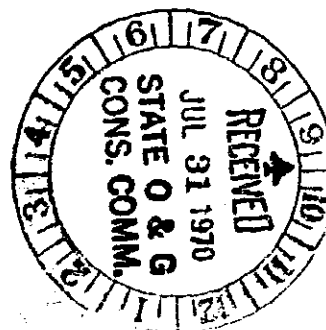
On July 20, 1970 we sent you two (2) copies of Application for Permit to Drill or Re-Enter (Form No. 3) covering the referenced well, with survey location plat attached.

At that time we did not know who the drilling contractor would be. For your information, the Lukachukai #1-14 will be drilled by Signal Oilfield Service, Inc., 1200 Security Life Bldg., Denver, Colorado 80202.

Yours very truly,

W. L. HIXON
District Production Manager

WLH:rw



544



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

July 23, 1970

Arizona Oil and Gas Conservation Commission
Room 202, 1624 West Adams
Phoenix, Arizona 85007

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
North Lukachukai Area
Apache County, Arizona
N00-14-20-2202

Gentlemen:

On July 20 we sent you two (2) copies of Application for Permit to Drill or Re-enter (Form No. 3) covering the referenced well, with survey location plat attached.

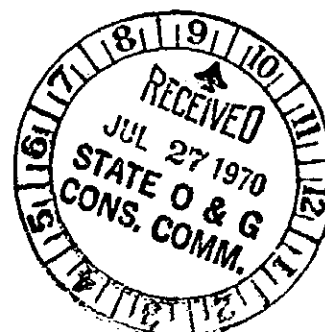
Enclosed are two (2) copies of a Designation of Operator from Buttes Gas and Oil Company.

We will appreciate your early approval of our application.

Yours very truly,

W. L. HIXON
District Production Manager

cc: Mr. John Seale, Houston Office (w/cc of Designation of Operator)
Encl.
WLH:rw



July 22, 1970

Mr. W. L. Hixon
Union Texas Petroleum Division
Suite 1010 Lincoln Tower
1860 Lincoln Street
Denver, Colorado 80203

Re: Union Texas Petroleum Lukachukai #1-14 Navajo (2202)
NE/4 SW/4 Sec. 14-T37N-R29E
Apache County
Our File #544

Dear Mr. Hixon:

Attached is your approved copy of our Form 3, Application to Drill or Re-enter. It is noticed that you propose to set plus or minus 225' of surface casing. Please make sure that the amount of casing set and cemented meets the requirements of Rule 8 of the rules and regulations of the Oil and Gas Commission.

Please forward the Designation of Operator from Buttes Gas and Oil Company to this office as soon as possible.

If we can be of any service to you, please feel free to call on us.

Very truly yours,

W. E. Allen
Director of Enforcement Section

WEA:jd
Enc.



Corporation

UNION TEXAS PETROLEUM DIVISION

SUITE 1010 LINCOLN TOWER • 1860 LINCOLN STREET • DENVER, COLORADO 80203 • 534-8221

July 20, 1970

Arizona Oil and Gas Commission
Room 202, 1624 West Adams
Phoenix, Arizona 85007

Subject: Lukachukai #1-14
NE SW Section 14-T37N-R29E
North Lukachukai Area
Apache County, Arizona
NOO-14-20-2202

Gentlemen:

Attached for your review and approval are two (2) copies of Application for Permit to Drill or Re-Enter (Form No. 3) covering the referenced well, with survey location plat attached.

Navajo lease survey plats for this location will be mailed later upon receipt from the surveyor's office in Farmington, New Mexico.

Enclosed are two (2) copies of a Designation of Operator form from W. T. Blackburn and our check No. 7770 in the amount of \$25.00 to cover permit for this well. The Designation of Operator from Buttes Gas and Oil Co. will be sent upon receipt. As you know, we have previously filed a blanket bond and Organization Report.

Yours very truly,

W. L. HIXON
District Production Manager

Copy of letter only sent to:

R. G. Berry Co., 227 Mayo Building, Tulsa, Oklahoma 74103
W. T. Blackburn, 1650 Denver Club Bldg., Denver, Colorado 80202
Buttes Gas & Oil Co., 1200 Denver Center Bldg., 1776 Lincoln St., Denver, Colorado 80203
St. Mary Parish Land Co., 1010 Denver Center Bldg., 1776 Lincoln St., Denver, Colorado 80203
Alf R. Thompson, et al, P. O. Box 69, Mattoon, Illinois 61938
Mr. John Seale, Houston Office
Encl.
WLH:rw

544

